Systematics of the Flea Weevils of the Tribe Ramphini (Coleoptera, Curculionidae) from East Asia I. Descriptions of New Taxa and Distribution Data of Some Species[1)]

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Abstract. First part of our study on the tribe Ramphini (=Rhynchaenini, Orchestini) from East Asia deals with weevils of the genera *Sphaerorchestes* gen. nov., ***Imachra, Synorchestes, Tachyerges, Hyporhynchaenus,*** *Indodinorrhopalus,* ***Rhynchaenus*** sensu nov. and some species of ***Orchestes*** from Japan based on the new system proposed in the second part of our study, which is to be published in the continuation paper. New taxa, recombinations, synonymies and new records treated in this paper are as follows:

Sphaerorchestes gen. nov., S. ***kawasei*** sp. nov. (Japan), S. ***kojimai*** sp. nov. (Sabah), S. ***nepalensis*** sp. nov. (Nepal)

Zmachra Pascoe, ***1873 = Orchestoides*** Roelofs, 1875, syn. nov. = *Copidorrhinus* Marshall, 1948, syn. nov. = ***Orchestinus*** Morimoto, 1964, syn. nov. ***Imachra saigusai*** sp. nov. (Taiwan); ***I.*** *albosuturalis* sp. nov. (Sabah); *I.* ***siamensis*** sp. nov. (Thailand); *I.* ***sabahna*** sp. nov. (Sabah); *I.* ***bifasciata*** sp. nov. (Sabah). I. *oculata* (Morimoto, 1964), comb. nov. ***(Orchestinus); I. maetai*** (Morimoto, 1964), comb. nov. ***Orchestoides), I. inornata*** (Voss, 1953), comb. nov. ***(Orchestoides);*** *I. bivittata* (Marshall, 1948), comb. nov. ***(Copidorrhinus); I. decipiens*** (Roelofs, 1875), comv. nov. ***(Orchestoides); I. nipponica*** (Morimoto, 1964), comb. nov. ***(Orchestoides); 1. mundus*** (Voss, 1958), comb. nov. ***(Orchestoides);*** and I. ***shirozui*** (Morimoto, 1964), comb. nov. ***(Orchestoides).***

Synorchestes grisescens Voss, 1958, new record from Taiwan.

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Tachyerges nakamurai sp. nov. (Japan); *T. dauricus* (Faust, 1882), new record from Japan.

Hyporhynchaenus sphinxioides sp. nov. (W. Malaysia).

Indodinorrhopalus Pajni et Sood, 1981 is transferred to Ramphini from Dinorrhopalini; I. *okushimai* sp. nov. (Thailand); 1. *guttatus* sp. nov. (Thailand, Napal).

Rhynchaenus pacificus (Faust, 1887) = *R. terminassianae* Egorov, 1978, syn. nov., new record from Japan and Korea.

Orchestes amurensis (Faust, 1887) = *Orchestes takabayashii* Kôno, 1930, syn. nov.

Orchestes (Orchestes) jota (Fabricius, 1787), new record from Japan.

Orchestes (Orchestes) yokoae sp. nov. (Japan:Amami-Oshima I.).

Keys to species of the genera *Sphaerorchestes, Imachra, Tachyerges, Indodinorrhoplaus* and *Rhynchaenus* are given.

Present paper dealts with the flea weevils of the tribe Ramphini (=Rhynchaenini) from East Asia including descriptions of a new genus and 12 new species on the new system proposed in the second part of our study, which is to be printed in the continuation paper, and genera *Orchestoides, Copidorrhinus* and *Orchestinus* are newly synonymized with *Imachra. Indodinorrhopalus* is transferred to the tribe Ramphini from Dinorrhopalini. Keys to species of the genera *Sphaerorchestes, Imachra, Tachyet-ges, Indodinorrhopalus,* and *Rhynchaenus* are given.

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Sphaerorchestes gen. nov.

Type-species: *Sphaerorchestes kawasei* sp. nov.

Body oval, convex; eyes large, its ventral margin lying on the level of lower 1/3 of rostrum at base; frons linear; rostrum cylindrical, weakly curved, long, reaching first ventrite when rested; antennae inserted in the middle of rostrum, antenna1 scrobes running obliquely from the middle of lateral surface towards latero-ventral edges of the base, interspace between the scrobes on the underside tapered posteriorly, dorsal edge of the scrobe reaching the lower base and distant from eye in lateral view; antennae with scape about as long as funicle, the latter six-segmented, club loosely segmented, third segment about as long as basal two segments combined, acuminate. Pronotum broadest at the base, basal corners rounded, basal margin weakly bisinuate, ocular lobes absent. Scutellum evident.

Elytra with rounded humeri, evenly rounded at sides and conjointly rounded at apex, each elytron with 10 striae, ultimate stria obsolete behind hind coxa. Pygidium exposed. Legs with femora unarmed, broadly sulcate beneath for receiving tibiae, hind femora swollen, much thicker than the anteriors, with a J-shaped apodeme; tibiae all unarmed at tip, tarsal groove bare, ascended upwards almost to the base along dorsal (exterior) edge; tarsi normal, third segment broader and deeply bilobate; claws divergent, each with a large appendage at the base, which is triangular and flat bearing a fine seta on the inner surface.

Prosternum emarginate at anterior margin, canaliculate before coxae, each side of the canal keeled, inside of the canal scaled as on the neighbouring areas, fore coxae narrowly but distinctly separated. Mesostemal process about as wide as a coxa and much broader than intercoxal process of first ventrite. Metastemum almost contiguous with first ventrite between hind coxa and metepistemum, the latter parallel-sided from the base to the middle, then dilated dorsally to apex. Four basal ventrites almost of the same length behind coxa, sutures deep, first suture weakly and the other sutures strongly curved posteriorly at sides.

Present new genus is close to *Imachra* in having the following common features: Tibiae not uncinate, tarsal groove ascended upwards to the base and forming entirely bare exterior surface of tibiae, club of antennae loosely segmented, about as long as funicle, third segment about as long as two basal segments combined, antenna1 scrobes straight and running obliquely to beneath the base of rostrum, prosternum canaliculate before coxae with sharp lateral carinae, fore coxae narrowly separated, mesosternal process about as broad as a coxa. But, it is characteristic in the slender rostrum, which is longer than the head and pronotum combined and reaching first ventrite when rested, and the lateral pieces of mesothorax densely clothed with plumose scales. The tergum of female abdomen has a pair of spicule patches on fifth and sixth tergites respectively, and the seventh tergite produced basally in the middle, with a pair of spines surrounded by several sensory pores. The male aedeagus is not examined.

Sphaerorchestes kawasei sp. nov.

(Figs. 1, 33-37)

Reddish brown, evenly covered with greyish hairy scales, which are denser on scutellum, and those on lateral pieces of mesothorax plumose and dense on mesepimera, with a characteristic blackish patch on elytra between fifth intervals, the patch formed of blackish setae, crescent with greyish incisions on second intervals from anterior margin.

Forehead between eyes linear, with a row of setae. Rostrum weakly curved, slightly dilated at apex; in male, with setiferous punctures excepting the underside, setae greyish and a little denser at base and at sides, median carina absent, lateral shallow sulcus extended anteriorly from the base above scrobe to 1/4 from apex on each side, a small bare space below eye at each side triangular, antennae inserted in the middle; in female, with small and scattered punctures, visibly bare, each puncture bears fine seta except for the base, where the setae a little longer and denser, lateral sulcus on each side along dorsal margin of scrobe bare and shallow, basal bare space below eye indefinite, antenna1 insertions just behind the middle of rostrum. Antennae with length (width) of segments from scape to club as 61(6):16(8):15(4.5):9(4.8):6(5):6(6):6(7):10(11):12(14):20(11).

Pronotum broader than long (8:3), rounded at posterior corners, then narrowing anteriorly in a weak curve to subapical constriction, which distinct at sides and obsolete on

disc, truncate at anterior margin, slightly bisinuate at posterior margin, neither sulcate nor costate, weakly punctate, interstices between them a little narrower than their diameter and alutaceous. Scutellum cordate, with dense greyish hairy setae, which are robuster than those on elytra.

Elytra ovate, 1.1 times as long as broad, broadest a little hehind humeri, evenly rounded at sides and apex, evenly convex dorsally, highest at the middle in profile, subapical calli on declivity obsolete, punctured striae becoming slightly weaker behind the middle, intervals flat, broader than striae. Pygidium perpendicular, convex along posterior margin of elytra, punctate, alutaceous.

Fore and middle legs almost of the same size and shape to each other, hind femora swollen, 2.1 times as long as broad, tarsal groove of hind tibia fringed with a row of black stout spines along apical margin.

Prostemal process nodulous at apex, its receptacle on stemellum also convex at anterior margin and nodulous on each corner. Mesosternal process flat, declivitous, punctate, truncate between middle coxae, weakly convex at each comer, about 1.3 times as broad as intercoxal process of first ventrite. Metasternum and venter similarly punctate and alutaceous, metasternum with an oblong fovea at the middle of hind margin, intercoxal process of first ventrite triangular, sutures of venter very sharp, second and third sutures double bordered in the middle.

Male terminalia and genitalia not examined.

Length to the base of rostrum: 2.5 mm.

Holotype: male (Type No. 3029, Kyushu Univ.), Tategasaki, Kumano City, Mie Pref., 12.iii.1992, Eiji Kawase leg.

Paratype: 1 female, same locality and collector, 23.x.1990.

Distribution: Japan: Honshu (Kumano City).

This new species is easily recognized by the conspicuous black patch on the elytra. Name is dedicated to Mr. Eiji Kawase, who collected this beautiful weevil for the first time.

Sphaerorchestes kojimai sp. nov.

(Fig. 2)

Similar to the preceding species, but the characteristic black patch on the elytra is V-shaped.

Male. Body almost black, rostrum and femora brownish black, apex of rostrum, antennae, tibiae and tarsi brownish; evenly covered with greyish hairy scales, with a V-shaped black patch on elytra between fifth intervals.

Forehead between eyes linear, with a row of setae. Rostrum weakly curved, almost of the same width throughout, slightly tapered apically in lateral aspect, with three irregular rows of punctures on each side excepting bare apex, each puncture with a seta, median carina indefinite, antennae inserted in the middle of rostrum, scrobes narrowly separated from lower margin of eyes at the base, the bare space below eye narrow. Antennae with length (width) of segments from scape to club as 58(8):17(7):14(5):10(5.6):7(6):6(6.5):7(8):9(11):9(12):22(10).

Pronotum about twice as broad as long, rounded at posterior comers, then narrowing anteriorly in a weak curve to subapical constriction, which weak at latero-ventral sides and obsolete on disc, truncate at anterior margin, weakly bisinuate at posterior margin, evenly

and weakly convex dorsally, densely punctate, interstices between them much narrower than their diameter and alutaceous. Scutellum ovate, similarly scaled as on the neighbouring areas.

Elytra ovate, slightly longer than broad, broadest a little behind humeri, evenly rounded at sides to apex, evenly convex dorsally, subapical calli obsolete, punctured striae becoming weaker on declivity, intervals flat, much broader than striae, with irregular 5-6 rows of scales. Pygidium perpendicular, about twice as broad as long, weakly convex, densely punctate, alutaceous.

Fore and middle legs almost of the same size and shape to each other, hind femora swollen, 2.1 times as long as broad, tarsal groove of hind tibia fringed with a row of blackish spines along apical margin.

Pro-, meso- and metastema as in *kawasei*. Ventrite as in *kawasei,* but evenly scaled.

Length to the base of rostrum: 2.4 mm.

Holotype: male (Type No. 3030, Kyushu Univ.), Poring hot spring, Sabah, East Malaysia, 20-26.iii.1993, H. Kojima leg.

Distribution: East Malaysia: Sabah.

This is conspicuous by the V-shaped black patch on the elytra. Name is dedicated to Mr. Hiroaki Kojima, who collected this interesting weevil.

Sphaerorchestes nepalensis sp. nov.

(Fig. 3)

Body shape similar to the preceding species, but is concolorous yellowish red except for blackish eyes and dark brown base of rostrum in male, evenly clothed with appressed greyish hairy scales, which are a little shorter on dorsal area of elytra, and a little denser on scutellum and lateral pieces of mesothorax.

Head as in the preceding species, with dense setiferous punctures, forehead between eyes linear, with a row of setae. Rostrum weakly curved, almost of the same size throughout, punctate in male, which becoming weaker at apex, with fine and scattered punctures in female, not carinate, lateral sulcus along dorsal margin of scrobe becoming narrower and extending apically beyond antenna! socket. Antennae with length (width) of segments from scape to club as 61(8):19(9):16(5.6):11(5.5):6(6):6(7):6.5(8):9(11):11(12):26(11).

Pronotum about 1.7 times as broad as long, rounded at posterior comers, then narrowing anteriorly in a weak curve to subapical constriction, which is almost indefinite on dorsum, anterior margin truncate, about 0.58 times as broad as the maximus width, posterior margin bisinuate, neither sulcate nor costate, weakly alutaceous, interstices between weak punctures narrower than their diameter. Scutellum ovate, weakly acuminate posteriorly, 1.3 times as long as broad, covered with deeply bifurcate scales.

Elytra ovate, 1.2 times as long as broad, broadest a little behind humeri, evenly rounded at sides and apex, evely convex dorsally, subapical calli obsolete, punctured striae becoming weaker on declivity, each puncture in the stria bearing an appressed setaceous scale, which is about as long as those on intervals, the latter flat, broader than striae, alutaceous, impunctate, each with five to six irregular rows of setaceous scales. Pygidium perpendicular, weakly convex at the middle, punctate, alutaceous.

Legs as in the preceding species except for paler coloration.

Prosternal process simple at apex, sternellum nodulous on each comer between coxae. Mesostemal process in male declivitous, flat, broad V-shaped at apex, slightly produced ventrad from the base of metastemum; in female declivitous, weakly hollowed medianly for receiving rostrum, each comer nodulous and convex. Metasternum in male trapezoidally depressed, which becoming deeper posteriorly; in female longitudinally depressed as a continuation from mesostemum to flat base of first ventrite. Venter as in the preceding species except for paler coloration.

In female, tergum of abdomen with a pair of spicule patches on fifth and sixth tergites respectively, seventh tergite weakly produced in the middle of basal margin, with a pair of setae surrounded by several sensrory pores. Spermatheca with the duct and gland close at the insertions.

Male genitalia not examined.

Length to the base of rostrum: 2.5 mm (holotype), 2.8 mm (paratype).

Holotype: male (Type No. 303 1, Kyushu Univ.), Dobang Kharka (2400m), Nepal, 10-14.x. 197 1 (Malaise trap).

Paratype: 1 female, Ponktable (1900m)-Buze (2800m), Nepal, 22.vii. 1972, H. Makihara.

Distribution: Nepal.

This new species is easily recognized by its coloration, structures of the mesostemum, and weak sulcus on the metastemum for receiving the rostrum.

Key to species of the genus *Sphaerorchestes.*

1(2) Derm concolorous yellowish red except for blackish eyes, evenly clothed with appressed greyish hairy scales, without any black patch; mesostemal process pointed at each comer. Nepal. (Fig. 3). . . . . ***Sphaerorchestes nepalensis*** sp. nov.

2(1) Derm brownish to blackish, with a conspicuous large black patch on elytra; mesosternal process rectangular at each comer.

3(4) Black patch on elytra crescent, with short incisions on second intervals from anterior margin; eyes at the lower margin on the middle level of rostrum at the base in lateral aspect. Japan. (Fig. 1). ..... ***Sphaerorchestes kawasei*** sp. nov.

4(3) Black patch on elytra V-shaped; eyes at the lower margin close to the ventral margin of rostrum at the base. Borneo (Sabah). (Fig. 2).
..... ***Sphaerorchestes kojimai*** sp. nov.

Imachra Pascoe, 1873

Imachra Pascoe, 1873, J. Linn. Soc., Zool., XII: 30 (Type-species: ***Imachra ruficollis*** Pascoe, 1873, by monotypy), - Voss, 1953, Ent. Blätt., 49: 65. - Voss, 1958, Decheniana, Beihefte 5: 103. - Morimoto, 1984, Esakia, (22): 23.

Orchestoides Reolofs, 1875, Ann. Soc. ent. Belg., XVIII: 191 (Type-species:Orchestoides ***decipiens*** Roelofs, 1875, by monotypy). - Kôno, 1930, Ins. Mats., IV: 21. - Voss, 1953, Ent. Blätt., 49: 65. - Voss, 1958, Decheniana, Beihefte 5: 103. - Morimoto, 1962, J. Fac. Agr., Kyushu Univ., 12: 43. - Morimoto, 1964, Kontyû, 32: 451. - Morimoto, 1984, Col. Jap. in col., IV: 295. - Morimoto, 1984, Esakia, (22): 19, 22. **syn. nov.**

Copidorrhinus Marshall, 1948, Novit. Zool., 42: 421 (Type-species: *Copidorrhinus bivittatus* Marshall, 1948, by original designation). - Morimoto, 1984, Esakia, (22): 23. **syn. nov.**

Orchestinrrs Morimoto, 1964, Kontyu, 32: 450 (Type-species: *Orchestinrts oculatus* Morimoto, 1964, by original designation). - Morimoto, 1984, Coleopt. Jap. in col., IV: 295. - Morimoto, 1984, Esakia, (22): 25. syn. **nov.**

Rostrum robust, straight, perpendicular to the axis of body in repose, tapered apically before antenna1 sockets in lateral aspect; antenna1 scrobes oblique, their dorsal margin reaching straightly to the base of the underside of rostrum and distant from eyes. Antennae geniculate, scape about as long as or shorter than funicle, funicle 7-segmented, first segment robust, fourth and fifth segments as long as broad, seventh segment transverse; club loosely segmented, third segment about half as long as club. Fore coxae large, separated; prosternum often emarginate at anterior margin, depressed before coxae with carinate lateral borders, with a few fine setae (in *Orchestoides* and *Copidorrhinus),* or emargination indefinite at anterior margin, prosternum slightly depressed, with scaling as nearby areas (in *Orchestinus* and *Imachra*), or emargination obsolete, depression indefinite, with scaling as nearby area (in some species described here). Mesosternal process broad, declivitous, truncate or emarginate at posterior margin, about as broad as a coxa, much broader than prosternal process and a little broader to almost as broad as intercoxal process of first ventrite. Venter with first suture distinct, second ventrite often bisinuate at posterior margin, as long as to a little longer than third ventrite, the latter as long as fourth. Pygidium almost or completely concealed by elytra in female, partly exposed at least in male or broadly exposed and perpendicular in both sexes. Femora unarmed, sulcate or flattened for receiving tibiae in repose, hind femora with a J-shaped apodeme. Tibiae almost straight, neither uncinate nor mucronate at apex, tarsal groove ascended upwards to the base forming entirely bare external surface.

As already be pointed out the close relationship of *Imuchru, Orchestoides* and *Copidorrhinus* by the senior author (1984), these genera and *Orchesrinus* are newly synonymized together because of the discovery of some intermediate species as described in this paper.

Imachra ruficollis (Figs. 9, 44-49) is distinct by the mimetic appearance to a certain species of Scymnine Coccinellidae. But similar mimetic patterns can be observed in many taxa such as *Endaeus makiharai* Kojima et Morimoto, *Endaeus bicoloripennis* Kojima et Morimoto, *Endaeus selangorensis* Kojima et Morimoto, *Zeionu pulchella* Pascoe, undescribed species of *Deporaus* and *Orchestes,* etc. These weevils were usually captured with many scymnine coccinellids at the same time on the leaves of evergreen trees in the tropical Asia by beating.

Copidorrhinus was established by Marshall (1948) on *bivittatus* Marshall in Anthonominae and compared with *Demimueu,* but the hind femora are greater than the anteriors, eyes are closely approximated above, rostrum is robust, antenna1 scrobes are straightly and obliquely passing downwards in front of eyes, antennae are 7-segmented in funicle, tibiae are unarmed at apex, tarsal groove of hind tibiae is ascended to the base forming bare surface externally, first to third sutures of ventrites curve posteriorly at sides, claws are appendiculate, prosternum is short in front of coxae and depressed with lateral carinae, and mesostemal process is broad. These characters fit well to those of *Imachra* and

Orchestoides except for the relatively slenderer hind femora than those of the other species treated here in ***Zmachra.***

Orchestinus was proposed by Morimoto (1964) on *oculatus* Morimoto by the strongly convex and prominent forehead from head and rostrum, transverse depressions on head behind eyes and at the base of rostrum, and subtriangular interocular area on forehead. As the strongly convex forehead with large eyes is also observed in ***Zmachra*** *albosuturalis* sp. nov. and the basal depression of rostrum is present in some other species of ***Imachra,*** the other characters mentioned above are considered to be specific rather than generic in this paper.

Imachra saigusai **sp.** nov.

(Fig. 4)

Reddish brown, eyes and base of rostrum blackish, antennae, tibiae, tarsi and apex of rostrum yellowish brown, underside of thorax chocolate brown, with greyish and dark brown hairy scales, greyish hairy scales forming following patches: pronotum with median stripes before and behind the middle, a pair of stripes on each side of middle on basal half, lateral stripe on each margin; elytra wtih a creamy white patch behind scutellum which is distinct and twice as long as scutellum, with four bands, basal band along basal margin narrow, antemedian band divaricated laterally from fourth interval, the anterior branch curved and continued to basal band on sixth interval, the posterior branch arched on each elytron, postmedian band broadest on fourth interval, apical band denser, with straight anterior margin.

Head with dense punctures and alutaceous, greyish scales denser around eyes and base of rostrum in male than in female; forehead between eyes linear, with a row of scales. Rostrum robust, reaching mesosternum in repose, rapidly narrowed anteriorly before antenna1 sockets in lateral aspect, almost parallel-sided in dorsal aspect, densely punctate on blackish basal area, nodulose above antenna1 sockets, shiny and almost bare on yellowish brown apical area, with triaugular bare and weakly depressed area on each side at base of rostrum below eye; scrobes oblique, straightly extending to the ventro-basal comers of rostrum and distant from eyes. Antennae inserted in the middle of rostrum, with length (width) of segments from scape to club as 30(8):15(8):10(6):7(6):5(6):5(6):5(6):6(7):41(14), club loosely segmented, first segment slightly longer than second, third segment half as long as club.

Pronotum broader than long (4:3), broadest at base, basal corners rounded, then narrowing anteriorly in a curve to weak subapical constriction, truncate at anterior margin, slightly arched posteriorly at basal margin, which is 1.8 times as broad as anterior margin, alutaceous, with dense punctures, which becoming weaker before subapical constriction, neither costate nor sulcate. Scutellum oblong-ovate, 1.7 times as long as broad, with hairy scales as on neighbouring intervals.

Elytra 1.2 times as long as broad, almost parallel-sided from fumeri to the middle, then evenly and conjointly rounded posteriorly, with faint emargination at apex of suture, subapical calli obsolete, punctured striae clear-cut, third and eighth striae conjointly rounded and a little depressed at apex, intevals flat, broader than striae. Pygidium evenly rounded posteriorly, shagreened.

Legs with hind femora 2.2-2.3 times as long as broad, tarsal groove of hind tibiae fringed with a row of black stout spines along apical margin.

Prosternum evenly and shallowly emarginate at anterior margin, each edge of the emargination angulate, subapical transverse sulcus shallow, but distinct and contiguous with coxae, prosternal process and stemellum depressed, as broad as a coxa, weakly nodulous at antero-lateral corners of sternellum, with a few small setae on the depressed part of prostemum. Mesosternal process oblique, flat, subtruncate at apex and weakly nodulous at postero-lateral comers, about twice as broad as prosternal process, and slightly broader than ventral process between hind coxae. Side areas of thorax similarly scaled, without dense area. Metastemum and median part of first ventrite punctate and transversely wrinkled, the latter with two rows of setae on each side behind coxa.

Length: 2.6 mm.

Holotype: male (Type No. 3032, Kyushu Univ.), Kenting, Pingtung Hsien, Taiwan, 4.iv.1965, T. Saigusa leg.

Paratypes: 1 male, sama data as holotype. Same locality as holotype, 6 males and 5 females, 22-26.ii. 1982, T. Lin & S. C. Lin leg.; 1 male and 5 females, 22-26.iii.1982, T. Lin & S. C. Lin leg.; 2 females, 5-9.xi. 1982, S. C. Lin & S. P. Huang leg.; 1 male and 3 females, 15. iii. 1984, K. C. Chou & C. C. Pan leg.

Distribution: Taiwan.

This species is easily recognized by the reddish color, definite postscutellar white patch and broad prostemal process between coxae. Name is dedicated to Prof. Toyohei Saigusa, who collected this interesting species for the first time.

Imachra albosuturalis sp. nov.

(Fig. 5)

Black, antennae and tarsi yellowish brown, apex of rostrum reddish broan; dorsum sparsely with appressed greyish hairs, which forming an indefinite band on declivity, a little larger greyish hairy scales dense on scutellum, sutural intervals of elytra in entire length, lateral sides of head, base of rostrum, anterior margin of prostemum, mesepimera and metepistema, meso- and metastema with similar hairy scales, but a little sparser than on metepistema, remainig area of elytra with brownish fine hairs, venter with appressed greyish brown hairs.

Head punctate, interstices between them shiny and narrower than their diameter; eyes large, contiguous on posterior half, linearly separated on anterior half, eyes and forehead strongly convex from head and forehead continued straightly to rostrum in lateral aspect. Rostrum straight, parallel-sided in dorsal aspect, weakly tapered apically in lateral aspect, as long as the major axis of eye, with small dense punctured excepting shiny apex, weakly compressed laterally and with a median short carina at base, with a U-shaped small bare area below eye on each side. Antennae inserted just before the middle of rostrum, with length (width) of segments from scape to club as 30(8):12(9):8(4.4):6(5):5(5):5(5):6(5):6(6):36(11), club segments 9(11):9(11):18(10), ultimate segment acuminate.

Pronotum 1.4 times as broad as long, broadest at the base, straightly narrowing anteriorly at sides, truncate at anterior margin, weakly bisinuate at posterior margin, narrowly emarginate at middle in front of scutellum, 1.6 times as broad as anterior margin, weakly

and evenly convex dorsally, punctate, neither costate nor sulcate. Scutellum ovate, a little longer than broad, flat.

Elytra ovate, 1.2 times as long as broad, broadest at 1/3 from humeri, broadly rounded at apical margin and shortly emarginate at apex of suture, punctured striae becoming weaker and narrower on declivity, ultimate stria distinct until hind coxa and abbreviated thereafter, intervals flat, subapical1 calli obsolete. Pygidium with exposed part subpentagonal, truncate at apex, punctate.

Legs with hind femora 2.5 times as long as broad, tarsal groove of hind tibiae fringed with a row of dark brown spines along apical margin.

Prostemum weakly emarginate at the middle of anterior margin, flattened to stemellum, without side carinae, with a few greyish hairy scales, without nodules at comers between coxae. Mesostemum flat, declivitous, subtruncate at apex, as broad as a coxa, four times as broad as prosternal process, almost as broad as intercoxal process of first ventrite. Venter with second ventrite weakly bisinuate at posterior margin, as broad at the narrowest portion as third ventrite, the latter depressed along anterior margin in median part. Underside punctate, alutaceous.

Length: 2.2 mm.

Holotype: male (Type No. 3033, Kyushu Univ.), Mamut, Sabah, East Malaysia, 11-14.viii.1981, K. Morimoto leg.

Distribution: East Malaysia (Sabah).

This species is easily distinguished by the greyish suture in entire length and large eyes, which are completely contiguous on basal half and strongly convex from the outline of head in profile.

Imachra siamensis sp. nov.

(Fig. 6)

Black, antennae and tarsi yellowish brown, apex of rostrum reddish brown, tibiae often dark brownish; derm clothed with greyishi, milky white, brownish grey and brownish black hairy scales; greyish hairy scales denser on head behind eyes, basal part of rostrum on dorsum, lateral areas of prothorax along anterior and posterior margins, mesosternum, mesepimera, median part of metasternum, and pro- and mesocoxae; milky white hairy scales denser along hind margin of pronotum, forming basal band on elytra between humeri, the latter band shortly produced posteriorly on fourth interval or broader on second and fourth intervals, and forming postscutellar short stripe, which is about twice as long as broad and becoming greyish posteriorly; remaining areas on head and pronotum with sparse brownish grey hairs, elytra often with scattered greyish short hairy scales on broad area except for blackish areas behind basal band and first interval, legs and venter with short greyish hairy scales.

Head densely punctate and alutaceous, weakly convex dorsally in lateral aspect, forehead between eyes linear, with a row of short greyish scales. Rostrum parallel-sided, twice (male) or three times (female) as long as broad, slightly narrowed from base to middle and parallel-sided thenceforwards in lateral aspect, basal area flattened dorsally and laterally above scrobes, and borders of the flat surfaces more or less edged longitudinally, weakly convex between antenna1 scrobes, flat and shiny at apex on dorsum, without bare area below eye; scrobes oblique, straightly extending to the ventro-basal comers of rostrum and distant

from eyes. Antennae inserted before the middle of rostrum, with length (width) from scape to club as 39(10):14(8):9(5.5):6(5):6(5.3):5(6):5(6.5):5(7):37(14), club 9(14): 10(14): 18(11), third segment of club less than half as long as total club, acuminate.

Pronotum about 1.6 times as long as broad, broadest at base, narrowed straightly or in a weak curve at sides towards faint subapical constriction, anterior margin truncate, posterior margin weakly bisinuate, 1.5 times as broad as anterior margin, alutaceous, with dense punctures, which becoming smaller and weaker in front of subapical constirction, neither costate nor sulcate. Scutellum ovate, about 1.5 times as long as broad, with dense greyish hairy scales, which being a little smaller than those of postcutellar patch.

Elytra about 1.1 times as long as broad, broadest at one-third from base, evenly rounded at sides from humeri to apices and notched at apex of suture, subapical calli obsolete, striae with large punctures, which becoming slightly narrower on declivity, first to fifth intervals flat and almost as broad as striae, remaining intervals narrower than striae. Pygidium broadly exposed, vertical, about as long as broad, evenly rounded at apex, weakly convex medianly, densely punctate, alutaceous.

Legs with hind femora 2.9-3.0 times as long as broad, tarsal groove of hind tibiae fringed with a row of brown spines along apical margin.

Prostemum with emargination of anterior margin indefinite, flat and similarly scales as on the lateral sides, stemellum bare, flat. Mesostemal process flat, declivitous, truncate with round comers at apex, as densely scales as on mesocoxa, about 7 times at parallel-sided part or 6 times at intercoxal part as broad as prosternum, intercoxal width same as that of hind one. Underside punctate, alutaceous, metasternum transversely wrinkled, first ventrite as broad as second behind coxa, second ventrite as long as third and fourth combined in the middle, third ventrite broadly and fourth ventrite narrowly depressed along anterior margin of the median straight part, fifth ventrite bent ventrad, shallowly trisinuate at apical margin.

Length: 2.5-2.7 mm.

Holotype: male (Type No. 3034, Kyushu Univ.), and paratypes: 3 males, Khao Chong near Trang, South Thailand, 26.vi.1965, Y. Miyatake leg.

Distribution: Thailand.

This new species is characteristic in the scaly patches on the elytra, large and vertical pygidium, simple and flat prostemum with hairy scales, and flattened rostrum on basal half at sides.

Imachra sabahna sp. nov.

(Fig. 7)

Black, antennae and tarsi reddish brown; derm clothed with greyish, yellowish brown and blackish hairy scales; greyish hairy scales denser on head behind eyes, basal angles of pronotum, scutellum, two transverse bands on elytra, fore coxae, and on mesepimera, sparser and smaller on the underside and pygidium, two bands on elytra interrupted on sutural interval, contiguous to each other on sixth interval by stripe, anterior band densely scaled on second interval; yellowish brown scales constitute a semicircular basal patch on elytra around scutellum leaving a narrow black spaces at the bases of second and third intervals, this patch extending as far as sixth interval along hind margin and narrowing laterally, dense on the base of sutural interval forming postscutellar patch.

Head densely punctate, alutaceous, dorsal contour evenly curved from vertex to base of rostrum in lateral aspect, forehead between eyes linear, with a row of short dark hairy scales. Rostrum about 2.5 times as long as broad, slightly dilated apically, compressed laterally at base, slightly curved in the middle on dorsal surface and almost straight on ventral surface in lateral aspect, with a median and latero-dorsal obtuse carinae, with an oblong median fovea on the median carina in the middle, punctate and alutaceous along inner margins of dorso-lateral carinae and lateral surfaces, impunctate and shiny on median carina and apex; scrobes oblique, straightly extending to the ventro-basal corners of rostrum and distant from eyes. Antennae inserted in front of the middle of rostrum, with length (width) from scape to club as 55(9):20(8):11(5):6(5):6(5):5(5.2):6(7):7(8.3):36(13), club 10(13): 10 (12.5):16(10).

Pronotum about 1.4 times as broad as long, broadest at base, narrowed in a curve at sides to weak subapical constriction, anterior margin truncate, posterior margin slightly bisinuate, with a faint emargination in front of scutellum, about 1.6 times as broad as anterior margin, evenly convex dorsally, densely punctate. Scutellum ovate, about 1.2 times as long as broad, flat, with dense hairy scales.

Elytra about 1.3 times as long as broad, broadest at one-third from base, evenly rounded at sides from humeri posteriad and separately rounded at apex, striae with large punctures, which becoing smaller on declivity, first to fifth intervals flat, as broad as striae, outer remaining intervals narrower than striae, subapical calli obsolete. pygidium broadly exposed, extending postero-ventrally, 1.5 times as broad as long, rapidly narrowing caudad and broadly rounded at apex, densely punctate, alutaceous.

Legs with hind femora 3.0 times as long as broad, tarsal groove of hind tibiae fringed with a row of brown spines along apical margin.

Prostemum shallowly emarginate at anterior margin, weakly depressed, with side carinae, scaled as on the nearby areas, stemellum flat, bare. Mesosternal process flat, oblique, broadly truncate with round comers as apex, as broad as a coxa, 4.0 times as broad as prosternal process, almost as broad as intercoxal process of first ventrite. Venter with second ventrite as broad as third and fourth combined in the middle, two-thirds at narrowest point as first ventrite behind coxa, bisinuate along posterior margin, third and fourth ventrites gradually depressed along anterior margins in the middle.

Length: 3.3 mm.

Holotype: female (Type No. 3035, Kyushu Univ.), Mt. Kinabalu, Sabah, East Malaysia, 19-2 1 .viii. 198 1, K. Morimoto leg.

Distribution: East Malaysia (Sabah).

This new species is similar to I. *siamensis* n. sp., but the elytra have two greyish bands, dorsal contour of head to rostrum evenly rounded across forehead in lateral aspect, and elytra are 1.3 times as long as broad.

Imachra bifasciata sp. nov.

(Fig. 8)

Black, tarsi, scape, club and apex of rostrum yellowish brown, funicle dark brown; derm with blackish brown hairs and markings of grey hairs; head with dense grey hairs behind eyes, rostrum between scrobes and forehead with small greyish hairs, prothorax with greyish long hairs on lateral and ventral sides, which becoming brownish and sparse around

pronotum, scutellum with dense grey hairs, elytra with grey postscutellar patch and two bands between second and sixth intervals, postscutellar patch about twice as long as scutellum, bands straight at their basal margins, interrupted by striae, metepimera with dense grey hairs, coxae, femora and underside with grey short hairs.

Head with dense punctures, forehead between eyes linear, with a row of scales; eyes large, so broad as the basal width of rostrum in lateral aspect that the dorsal margin of scrobe close to eye leaving a very narrow space between them including a puncture. Rostrum about 2.3 times as long as broad, parallel-sided, forehead slightly higher than head and rostrum, slightly narrowing apically from base in lateral aspect, with a shiny median carina on basal two-thirds, lateral surface above scrobe at the base flat and oblique, apex impunctate. Antennae inserted in the middle of rostrum, with length (width) from scape to club as 27(8):16(7.5):9(5.1):6(5.3):6(6):6(6.7):5.5(7.2):5(8.5):48(14.5), club 11(13):14(14.5):23 (14), third segment of club less than half as long as total club,.

Pronotum about 1.3 times as broad as long, broadest at the base, narrowed in a weak curve at sides to weak subapical constriction, anterior margin truncate, posterior margin slightly bisinuate, about 1.5 times as broad as anterior margin, with dense punctures, alutaceous, weakly convex dorsally, neither sulcate nor carinate. Scutellum ovate, 1.5 times as long as broad, flat, with dense greyish hairs, which are almost as great as those of postscutellar patch.

Elytra parallel-sided from humeri to beyond the middle and broadly rounded posteriorly, emarginate at apex of suture, striae with large punctures, which scarcely weaker posteriorly, first to fifth intervals flat, as broad as striae, the outer intervals narrower than striae. Pygidium largely exposed, vertical, 1.4 times as broad as long, broadly rounded posteriorly, weakly convex medianly, densely punctate, alutaceous.

Legs with hind femora three times as long as broad, tarsal groove of hind tibiae fringed with a row of dark brown spines along apical margin.

Prostemum with emargination of anterior margin slight, flat and similarly scaled as on the nearby areas, side carinae indefinite, stemellum bare, shallowly depressed. Mesosternal process flat, oblique, weakly concave along apical margin, four times as broad as prosternal process, 1.5 times as broad as intercoxal distance of first ventrite. Venter with median length of seond to fourth ventrites as 12:9:6, second ventrite weakly bisinuate, as long at narrowest point as first ventrite behind coxa, third ventrite broadly depressed along anterior margin in the median part.

Length: 2.4 mm.

Holotype: female (Type No. 3036, Kyushu Univ.), Mt. Kinabalu, Sabah, East Malaysia, 18-21.viii.1981, K. Morimoto leg.

Distribution: East Malaysia (Sabah).

This new species may be close to *Copidorrhinus bivittatus* Marshall, but the pronotum is evenly convex dorsally, the pygidium is exposed and the prostemal depression is indefinite.

Key to species of the genus *Imachra*

l(2) Pronotum and elytra uniformly clothed with appressed greyish hairs, immaculate, bicolorous, elytra excepting apical margin, meso- and metathoraces, and basal

two ventrites black, the other parts yellowish red to reddish; elytra ovate, pygidium concealed. Borneo: Sarawak, Sabah; China Fukien. (Fig. 9).
..... *Imachra ruficollis* Pascoe, 1874

2(1) Pronotum and elytra maculate or mottles with different kinds of hairs, pronotum and elytra concolorous.

3(4) Forehead between eyes triangularly dilated anteriorly, strongly convex from the outline of head, which is transversely depressed behind eyes and at the base of rostrum. Japan: Iriomote I. (Fig. 10).
..... *Imachra oculata* (Morimoto, 1964), comb. nov.

4(3) Forehead between eyes linear, rostrum not depressed at the base.

5(6) Elytra with first intervals greyish in entire length; eyes large, contiguous on posterior half, linearly separated on anterior half, eyes and forehead strongly convex from head and continuous to rostrum on the dorsal contour in lateral aspect. East Malaysia: Sabah. (Fig. 5). ..... *Imachra aibosuturalis* sp. nov.

6(5) Elytra often with postscutellar patch, but not with greyish stripe in entire length; eyes separated by linear forehead.

7(16) Elytra without a postscutellar patch, parallel-or subparallel-sided at least on basal half.

8(9) Entirely reddish brown to rusty red, elytra with the apical and lateral margins, and pronotum with lateral margins broadly covered with greyish hairs, the greyish area marginate internally with dark brown to blackish hairs on elytra; body slender, pronotum about as long as wide, anterior margin weakly arched, slightly narrower than posterior margin (17:20), the latter slightly arched posteriorly; second ventrite 1.5 times as long as third in the middle, much shorter than third and fourth combined. Japan: Kagoshima, Okinawa I. (Figs. 1 1, 47-49). ..... *Imachra maetai* (Morimoto, 1964), comb. nov.

9(8) Elytra black or dark brown, with greyish bands or greyish along basal margin.

10(11) Elytra somewhat closely covered with greyish hairs along basal margin. China: Fukien. ..... *Imachra inornata* (Voss, 1953), comb. nov.

1 1(10) Elytra with two to four scaly fasciae; scutellum with dense greyish hairs.

12(13) Elytra dark brown, with two pale fasciae; pronotum raised into a large high elevation beyond the middle; hind femora more than three times as long as broad. Burma. ..... *Zmachra bivittata* (Marshall, 1948), comb. nov.

13(12) Elytra black, with three or four fasciae; pronotum evenly convex dorsally; hind femora at most three times as long as broad.

14(15) Elytra with three greyish bands, basal band along hind margins continous across first intervals behind scutellum, antemedian and postmedian bands more sinuate and denser. Japan: Shikoku, Kyushu, Tsushima, Ryukyus; Taiwan; China: Fukien. (Fig. 12). ..... *Zmachra decipiens* (Roelofs, 1875), comb. nov.

15(14) Elytra with four greyish bands, basal band along basal margin usually interrupted by first interval, antemedian and postmedian bands less sinuate, subapical band often separated into two patches. Japan:Honshu, Shikoku, Kyushu. (Fig. 13).
..... *Zmachra nipponica* (Morimoto, 1964), comb. nov.

16(7) Elytra with a postscutellar greyish to yellowish grey patch.

17(18) Derm blackish brown, elytra with black mark on subapical calli, postscutellar yellowish white patch long, almost occupying the basal half of suture, often with indistinct hairy patch on fifth and sixth intervals behind basal third. China: Fukien. ..... *Imachra mundus* (Voss, 1958), comb. nov.

18(17) Elytra concolorous, postscutellar patch short, not reaching basal third of suture.

19(20) Derm entirely reddish brown, base of rostrum blackish, antennae, tibiae, tarsi and apex of rostrum yellowish brown, underside of thorax chocolate brown, with three greyish pale and a dense apical band on elytra. Taiwan. (Fig. 4).
..... ***Imachra*** *saigusai* sp. nov.

20(19) Derm black, with yellowish brown tarsi and antennae, and reddish brown apex of rostrum; apical band on elytra if present not denser than the anteriors.

21(22) Scutellum bare, pronotum with three stripes, elytra with four bands. Japan: Shikoku, Ryukyus; Taiwan. ..... *Imachra* ***shirozui*** (Morimoto, 964), comb. nov.

22(21) Scutellum clothed with greyish hairs as on neighboring areas, pronotum without median stripe, elytra at most with three bands.

23(24) Elytra parallel-sided to beyond the middle, 1.4 times as long as broad, with two bands which straight at their basal margins, interrupted by suture and reaching laterally to 6th interval. East Malaysia: Sabah. (Fig. 8).
..... ***Imachra*** *bifasciata* sp. nov.

24(23) Elytra ovate, 1.1-1.3 times as long as broad, evenly rounded laterally, with yellowish to milky white hairy band or patch at the base.

25(26) Elytra 1.3 times as long as broad, with two greyish bands besides yellowish basal band, dorsal contour of head evenly rounded across forehead and continuous straightly to rostrum in lateral aspect. East Malaysia: Sabah. (Fig. 7).
..... ***Imachra sabahna*** sp. nov.

26(25) Elytra 1.1 times as long as broad, often with scattered greyish short hairy scales on broad area besides basal and postscutellar patches, dorsal contour of forehead slightly convex from base of rostrum and vertex in lateral aspect. South Thailand. (Fig. 6). ..... *Imachra* ***siamensis*** sp. nov.

Synorchestes Voss, 1958

Synorchestes Voss, 1958, Decheniana, Beihefte 5: 103 (Type-species: ***Synorchestes grisescens*** Voss, 1958, by original designation).

Rostrum as long as head in male, or a little shorter then pronotum in female, weakly curved, slightly dilated apically in dorsal aspect, flattened at apex and weakly tapered apically in lateral aspect, weakly convex above antenna1 sockets and foveate between them; scrobes with dorsal margin reaching straightly to the lower part of eye and widely distant to each other at the base. Antennae inserted in the middle of rostrum, funicle 7-segmented, club about as long as funicle, loosely segmented, first and second segments moniliferous, apical segment longer than two precedings combined. Prothorax trapezoidal, broadest at the base. Scutellum evident, longer than broad. Elytra with distinct humeri, first stria not reaching the base, ultimate stria abbreviated behind hind coxa. For coxae large, lying on the middle of prosternum, contiguous to each other; prosternum neither emarginate nor

depressed in front of coxae. Mesostemal process much narrower than a coxa and slightly narrower than ventral process. Venter with first ventrite behind coxa as long as second and slightly longer than third, the latter as long as fourth, sutures well-marked, first suture weakly and the remaining sutures strongly curved posteriorly at sides. Pydidium and greater part of propygidium exposed in male, pygidium large and broadly exposed in female. Femora sulcate on distal third for receiving tibiae, fore and middle femora of the same size, hind femora weakly swollen, with a J-shaped apodeme; tibiae not uncinate nor mucronate at apex, tarsal groove not ascended; claws strongly divaricate, each with a flat and broad tooth and a fine seta at the base.

This genus contains only one species and is characteristic by the loose antenna1 clubs, unarmed apex of the tibiae, and broadly exposed propygidium in male and large pygidium in female. The hind femora are relatively slenderer than those of the other genera in this tribe, but the femoral apodeme is of normal size and J-shaped.

***Synorchestes grisescens* Voss,** 1958

(Figs. 15, 38-43)

Synorchestes grisescens Voss, 1958, Decheniana, Beihefte 5: 103 (China: Fukien; fig. 9).

This species is easily recognized by the concolorous vesture of greyish scales with slight bluish tinge on the entirely black derm.

Specimens examined: 2 males, Sha Piug (alt. 1000 m) and Shi Nan Shan, near Liu Kui, Southern Taiwan, 29.iv.1986, K. Baba leg. 1 female, near Liukuei, Kaohsiung Hsien, Taiwan, 5-9.iv.1995, H. Kojima leg.

Distribution: China (Fukien), Taiwan-new record.

Tachyerges Schoenherr, 1825

See Klima (1935) and Anderson (1989) for synonymy.

Type-species: *Curculio salicis* Linnaeus, 1758, by original designation,

Tachyerges was originally described as a subgenus of ***Orchestes*** and had been treated as such until Anderson (1989), who stressed on the importance of the number of segments in the funicle, namely seven segments in ***Tachyerges*** instead of six in the other genera, and raised it to full genus. But his treatment evades persuasive explanation in the case of *Isochnus,* which comprises both species with six and seven segments in the funicle. Besides the antennae as mentioned, ***Tachyerges*** has following apomorphic characters: Tergum of abdomen with a pair of spicule patches on fifth, sixth and seventh tergites respectively, those on seventh tergite smaller and lying on pale areas; tergites separated medianly from first to fifth or to sixth segments; spermathecal gland inserted at about the middle to basal third of spermatheca and widely distant from the insertion of spermathecal duct.

Following two species are newly recorded from Japan.

***Tachyerges dauricus* (Faust, 1882)**

(Figs. 17, 54-59)

Orchestes dauricus Faust ***(Tachyerges), 1882,*** Deut. Ent. Zeit., XXVI: 281 (Daurien u. Nertschinsk).

Rhynchaenus (Tachyerges) dauricus: Winkler, 1932, Cat. Col. reg. palaearc., 1631. - Klima, 1935, Col. Cat., ***145,*** Rhynchaeninae: 11. - Ter-Minassian, 1953, Ent. Oboz., XXXIII: 318 (Zabaykaliy). - Egorov, 1977, Syst. Faun. Ins., Zool. Inst., AN SSSR: 39 (Zabaikaliy, Priamuriy, Primoriy).

Black, antennae, fore and mid legs, and hind tarsi brownish red; pronotum with median stripe formed of internally appressed greyish brown hairs, scutellum with dense greyish hairs, elytra with two greyish hairy bands, antemedian band medially thick, narrowed laterally, contiguous to scutellum on sutural interval, produced posteriorly on second interval, often brownish to yellowish on first to fourth intervals, postmedian band narrow, almost transverse on first to third intervals, then a little changed anteriorly on fourth to fifth intervals.

Length: 2.4-3.3 mm.

Specimens examined: Tsukurimichi, Senboku-gun, Akita Pref., 1 male, 10.vi.1983, S. Miyakawa leg. Funamata-rindo, Minamiaizu-gun, Fukushima Pref., 1 male, 16.v.1982, K. Emoto leg; lmale 2 females, 20.v.1983, S. Miyakawa leg. Nanairi, Minamiaizu-gun, Fukushima Pref., 1 male, 20.v.1983, S. Miyakawa leg. Shirakawa-mura, Gifu Pref., 1 female, 13.vi.1990. T. Nohira leg.

Distribution: Russian Far Eat, Japan (Honshu)-new record.

Tachyerges nakamurai sp. nov.

(Figs. 18, 19, 60-65)

Black, antennae, fore and mid legs, and hid tarsi brownish red; pronotum only with several greyish hairs in front of scutellum and without median stripe, scutellum with dense greyish hairy scales, elytra with postscutellar greyish patch on basal quarter of first intervals, postmedian greyish band narrow, extending latero-anteriorly to fifth interval in a hollowed curve, often with an oval greyish patch on second interval beside the end of postscutellar stripe, often with one to five greyish hairs on fourth and sixth intervals at quarter from base, legs and underside with scattered greyish small hairs, which a little larger and denser on pro- and mesostema, pro- and mesocoxae and and lateral pieces of meso- and metathoraces, the other part of pronotum and elytra with minute brownish black hairs and almost bare in naked eyes.

Head and pronotum with dense punctures and alutaceous, without median bare line; forehead between eyes contiguous to each other on basal third, without hairs, then gradually widening anteriorly, with hairs, dorsal contour of head to rostrum across forehead evenly curved in lateral aspect. Rostrum 2.7 (male) or 3.3 (female) times as long as broad, weakly curved, with oblong punctures and rugulose between dorsal edges of scrobes and sides in front of scrobes, and shiny at apex (male) or punctures becoming sparser and shiny before antenna1 sockets (female). Antennae inserted a little before the middle (male) or in the middle (female) of rostrum, antenna1 insertion index 43 (male) or 40 (female), scape slightly longer than first and second of funicle combined (15: 14).

Pronotum 1.3-l .4 times as broad as long, broadest and rounded at basal third, then straightly narrowing anteriorly, slightly narrowing basally, subapical constriction weak at sides and obsolete on disc, basal margin 1.3-1.5 times as broad as anterior margin, densely punctate, rugulose and coriaceous as on head, without erect setae at sides. Scutellum tongue-shaped, 1.4 times as long as broad, with dense greyish hairy scales as on postscutellar patch.

Elytra 1.4-1.5 times as long as broad, broadest in the middle, evenly curved from humeri to apices, with short notch at apex of suture, striae deep throughout, first interval flat, the other intervals convex, each inteval with two irregular rows of punctures and short appressed setae. Apical margin of pygidium exposed.

Fore coxal cavities almost contiguous in the middle, boundary of prosternal process and stemellum depressed. Femora unarmed, hind femora about three times as long as broad, rather strongly curved posteriorly at apex. Hind tibiae straight, simple, tarsal groove ascended upwards to 1/3 from apex. Underside with punctures, those on anterior margins of second to fourth ventrites obsolete, metastemum and first ventrite transversely strigulate.

Length: 2.3-2.9 mm.

Holotype: male (Type No. 3037, Kyushu Univ.,), Ichinowatari-rindo, Hirosaki City, Aomori Pref., 14.v.1988, T. Nakamura leg.

Paratypes: 1 male and 2 females, same data as holotype. Natsuyagawa, Kawai-mura, Iwate Pref., 2 females, 29.vi.1995, M. Horikawa leg. Hiyagata-Kunimi Onsen, Akita Pref., 1 male, 17.vi.1974, S. Miyakawa leg. Kakkohzawa, Nasu-machi, Tochigi Pref., 1 male, 17.v.1989, H. Watari leg. Takamine-kogen, Tsumagoi-mura, Gunma Pref., 7 males and 16 females, 14.vii.1994, M. Horikawa leg. Hakusan-tozando, Shirakawa-mura, Gifu Pref., 1 male and 3 females, 14.viii. 1987, T. Nohira leg.

Distribution: Japan (Honshu).

Out of 34 specimens before us, five have typical scaly patches on elytra as described, seven have lost the oval patch on second interval and have faint postmedian band, and the other has only postscutellar patch. Mr. Horikawa collected many specimens on *Salix reinii* (Miyamayanagi in Japanese). Name is dedicated to Mr. Takayuki Nakamura, one of our students in Kyushu University.

Key to species of the genus *Tachyerges.*

[R. plinthotrichus (Kolenati, 1859) from Caucasus, ***R. pubescens*** (Motschulsky, 1845) from the Kamchatka and ***R. empopulifolis*** Chen, 1988 from China are not included]

1(12) Femora and tibiae entirely black.

2(7) Dorsal surface entirely black with blackish pubescence except for greyish scutellum and at most with an indistinct greyish hairy band at basal third of elytra.

3(6) Elytra immaculate, antennae brownish black, inserted in the middle (male) or behind the middle (female) of rostrum.

4(5) Punctures on the basal extremity of rostrum rounded or slightly ovate in general. Penis broad, with setae along apical margin. Palaearctic region; Japan: Hokkaido, Honshu. ..... *Tachyerges stigma* (Germar, 1805)

5(4) Punctures on the basal extremity of rostrum elongate, elliptic or fusiform and more regularly disposed. Penis narrower and without setae along apical margin. Europe to North China. ..... ***Tachyerges pseudostigma*** (Tempere, 1982)

6(3) Elytra often with greyish indefinite band at basal third, antennae yellowish red to black, inserted before the middle (male) or in the middle (female). Penis as in

stigma, but apical margin almost transverse with obtuse triangular apical point in the middle. North America. (Fig. 21). . . . . ***Tuchyerges niger*** (Horn, 1873)

7(2) Elytra with hairy bands.

8(9) Elytra with two greyish bands formed of one or two rows of hairy scales on each interval and broadly interrupted by striae, tarsi reddish brown. Europe. ..... ***Tuchyerges*** *decoratus* (Germar, 182 1)

9(8) Elytra with two bands formed of three to five irregular rows of hairy scales on each interval and narrowly interrupted by striae in general.

10(11) Elytra with intervals flat, much broader than striae, antemedian band medially thick, often yellowish on first two or three intervals, tarsi reddish brown. Europe. ..... ***Tuchyerges*** *rufitarsis* (Germar, 1821)

11(10) Elytra with intervals convex, shiny, antemedian band hardly or slightly thick medially, tarasi blackish. Holarctic region; Japan: Hokkaido, Honshu. (Fig. 16). ..... ***Tuchyerges*** *salicis* (Linnaeus, 1758)

12(1) Fore and mid femora and tibiae entirely or partly reddish brown.

13(14) Integument of elytra underlying hairy bands brownish red. North Ameica. (Fig. 20). ..... ***Tuchyerges*** *ephippiatus* (Say, 183 1)

14(13) Integument of elytra concolorous black.

15(16) Elytra with antemedian band thick medially and rhomboidal, extending anteriorly to the base and posteriorly to the postmedian band on first and second intervals. Japan: Honshu. ..... ***Tuchyerges uwomoriensis*** (Roelofs, 1874)

16(15) Elytra with antemedian band if present broadly separated from postmedian band and not reaching basal margin on second interval.

17(18) Elytra with conspicuous antemedian band between sixth intefvals, often yellowish on median part, first to third intervals flat and about as broad as striae. Russian Far East, Japan: Honshu. (Fig. 17). ..... ***Tuchyerges*** *dauricus* (Faust, 1882)

18(17) Elytra with postscutellar patch, often with oval patch on second interval at basal third and postmedian transverse band, intervals convex and narrower than striae. Japan: Honshu. (Figs. 18, 19). ..... ***Tuchyerges*** *nakamurai* sp. nov.

Hyporhynchaenus Voss, 1940

Rhynchuenus (Hyporhynchuenus) Voss, 1940, Tijdschr. Ent., 83: 79 (Type species: ***Rhynchuenus (Hyporhynchuenus)*** *lauraceae* Voss, 1940).

Hyporhynchaenus: Anderson, 1989, Trans. Am. ent. Soc.,115(3): 214.

The type species is unknown to us, but the present taxon can be defined from the original description on these characters that the antennae have seven segments in the funicle and the clubs are loosely segmented, the fore coxae are separated by about a half the width of a coxa, and the elytra are ovate, short and convex. This taxon was originally described as a subgenus of ***Rhynchuenus,*** but Anderson (1989) raised to full genus on the antennae, which have seven segments in the funicle. Its systematic position will be discussed in the second report on the Ramphini in this journal.

Hyporhynchaenus sphinxioides sp. **nov.**

(Figs. 22, 50-53)

Male and female. Black, antenna1 scape and funicle, rostrum before antenna1 insertion, tarsi yellowish to reddish brown, legs dark brown to blackish, tibiae a little lighter; derm evenly clothed wtih greyish hairy scales on dorsum, those of whitish and greater ones dense at the base of rostrum, latero-ventral sides of head behind eyes, lateral and ventral surface of prothorax, mesosternal process and lateral pieces of meso- and metathoraces, the other ventral area and legs with whitish, a little sparser and smaller hairy scales.

Head with dense punctures, each puncture with a recumbent greyish white setae, the setae become denser and whitish on lateral part behind eye; forehead between eyes linear, with a row of setae. Rostrum 2.0 (male) or ***2.6*** (female) times as long as broad, as long as (male) or a little longer than (female) pronotum, weakly curved, slightly widening anteriorly before antenna1 insertion; dorsum with bare, shiny and obtuse median carina on basal half, with an oblong and shallow median fovea between the antenna1 sockets, with rugose punctures and clothed with two rows of recumbent white setae on each side above antenna1 scrobe; antenna1 scrobe widening and running toward the lower part of eye. Antennae inserted just a little before (male) or in the middle (female) of rostrum, antenna1 insertion index 40 (male) or 50 (female), scape touching anterior part of eye, with length (width) of segments from scape to club as: 30(6):12(6):10(3):7(3):6(3):5(3):5(3):4(3.8):10(7):10(7):12(4.5), club loosely segmented, a little longer than scape, ultimate segment acuminate.

Pronotum 1.7-1.8 times as wide as long, rounded at posterior comers, then narrowing anteriorly in a weak curve to subapical constriction, which weak at sides and obsolete on disc; dorsum densely punctured, clothed with recumbent greyish white setae, with a few subrecumbent setae at anterior margin. Scutellum tongue-shaped, clothed with setae as on pronotum.

Elytra ovate, moderately convex dorsally, 1.7- 1.8 times as long as broad, broadest in the middle, weakly and evenly curved from humeri to apices, striae punctate throughout, each puncture with a greysih white seta, each interval clothed with appressed greyish white setae and with one or partly two rows of decumbent longer setae. Pygidium exposed in male.

Fore and middle femora each with a spine, hind femora 2.7 times as long as broad, with a shallow sulcus for receiving tibiae, which becoming obsolete basally from the middle. Fore tibiae each with a large uncus from outer angle. Middle tibiae short, each with a long uncus. Hind tibiae straight, simple, tarsal groove ascended upward to 1/3 from apex.

Fore coxal cavities narrowly separated. Mesostemal process a little narrower than a coxa, weakly narrowed apically, about 0.65 times as wide as intercoxal process of first ventrite, which is almost truncate. Venter punctate and alutaceous, third and fourth ventiries each with irregular two to three rows of appressed hairy setae in the middle.

Length: 2.3-2.6 mm.

Holotype: male (Type No. 3038, Kyushu Univ.), Bukit Larut, near Taiping, West Malaysia, 25-27. vii. 1995, H. Kojima leg.

Paratype: 1 female, same data as holotype.

Distribution: West Malaysia.

This is very close to the type species, but the latter has "Fühler im vorderen Drittel bis Viertel eingelenkt. Die Spitze des Schafts erreicht nicht ganz die Augen. Keule fast so lang wie die Geissel, 2. Glied fast so lang wie breit, 3. Glied mit dem Endglied so lang wie das 1.

und 2. Glied zusammen. Vorderhüften um etwa die Hälfte ihres Durchmessers von einander entfemt stehend", and easily separable from it.

Indodinorrhopalus Pajni et Sood, 1981

Indodinorrhopalus Pajni et Sood, 1981, Oriental Insects, 15: 32 (Type-species: *Indodinorrhopalus* ***imphalensis*** Pajni et Suhesha Sood, 1981, by original designation).

This genus was originally described in the tribe Dinorrhopalini, but belongs to the tribe Ramphini (=Rhynchaenini) according to the definition given by Morimoto (1984).

Rostrum about as long as pronotum, antennae with six segments in funicle, club with basal two segments transverse. Prosternum not canaliculate, simple; fore coxae contiguous. Mesostemal process much narrower than a coxa. Venter with first suture weak, second to fourth sutures distinct, strongly curved posteriorly at sides. Legs with fore and middle pairs of the same size and shape; femora unarmed, not sulcate for receiving tibiae; hind femora with a J-shaped femoral apodeme; tibiae neither uncinate nor mucronate, tarsal groove ascended upwards almost to the base along exterior edge; claws divaricate, each with a tooth and a seta at the base. Tergum of abdomen with four pairs of spicule patches from fourth to seventh segments. Spermatheca rather slender, spermathecal gland inserted behind the middle and widely distant from the insertion of the duct.

This genus is easily recognized by the unarmed apex of the tibiae, not sulcate femora, and simple prosternum.

Indodinorrhopalus okushimai sp. nov.

(Fig. 25)

Male. Yellowish brown; eyes blackish; basal half of rostrum, median patch on vertex, lateral and ventral surface of prothorax excepting anterior and posterior margins, metepistema and latero-basal comers of elytra below humeri dark brown; legs. and venter pale brownish yellow, evenly and thinly clothed with greyish brown to yellowish brown and blackish hairy scales, the latter forming a pair of indefinite dark patches on pronotum and three indefinite bands on elytra.

Head densely punctate, alutaceous; eyes well convex laterally; forehead between eyes half as wide as the base of rostrum, shallowly depressed, with sparse fine punctures and alutaceous excepting sides. Rostrum continuous to forehead in dorsal contour, about as long as head and pronotum combined, almost of the same width and thickness throughout, slightly curved, with oblong punctures on dorsum, which confluent longitudinally leaving a pair of latero-dorsal carinae behind antenna1 sockets, lateral carina above antenna1 scrobe rather sharp, punctures and carinae becoming weaker and indefinite thence apically. Antennae inserted before the middle of rostrum, with length (width) of segments from scape to club as 50(9):20(10):15(5.2):8(4.8):7(5):6(6):5(7.9):6(12):7(13):17(12).

Pronotum 1.4 times as broad as long, broadest behind the middle, almost parallel-sided thereafter to base and rapidly narrowing anteriorly to subapical constriction, which is distinct at sides and indefinite on disc, truncate at anterior margin, bisinuate at posterior margin, disc with dense punctures, their interstices much narrower than diameter and alutaceous, with two or three stout setae at each anterior comer and two or three setae

between broadest point and hind comer on each side. Scutellum subtrapezoid, flat, with a few hairy scales.

Elytra ovate, 1.3 times as long as wide, widest at the middle, basal margin weakly arcuate over the base of pronotum between first and fourth striae, striae distinct throughout, intervals convex, much broader than striae, first interval shortly depressed at base, third interval slightly wider than nearby intervals at base. Pygidium mat, punctate.

Fore and middle legs of the same size and shape, hind femora swollen, twice as long as broad, tarsal groove of hind tibia fringed wtih a row of black stout spines along apical margin.

Mesostemal process oblique, with scattered punctures, shallowly concave in contact with arched metastemal process and a pair of large punctures at apical margin. Metastemum and venter similarly punctate and haired, intercoxal process of first venter slightly angulate in the middle, first suture indefinite in the middle.

Terminalia and genitalia not examined.

Female unknown.

Length to the anterior margin of head: 2.8 mm.

Holotype: male (Type No. 3039, Kyushu Univ.), Doi Suthep, Chaing Mai, Thailand, 12-16.iii.1992, Y. Okushima leg.

Distribution: Thailand.

This new species is close to I. *imphalensis* in having the broad frons between eyes, but the pronotum is truncate at anterior margin and the basal margin of elytra is weakly produced anteriorly in an arc between the first and fourth striae, whereas in ***imphalensis*** the pronotum is arched at anterior margin and the elytron is almost straight at the base according to the photograph in the original description. Name is dedicated to Mr. Yuichi Okushima, who collected this interesting weevil.

Indodinorrhopalus guttatus sp. **nov.**

(Figs. 23, 24, 66-76)

Coloration variable, eyes always black, the rest entirely fulvous in the most pale specimens, or fulvous with blackish sterna and elytral patches in the spotted specimens, in latter case, elytra usually with five blackish patches, sutural stripe along the middle of suture, basal spot between third stria and shoulder, and the median spot on fourth to sixth intervals, sutural stripe often obsolete, basal and median spots frequently extended laterally and continuous to each other along lateral margin, hind femora often with dark patch at apex; derm evenly clothed with yellowish grey hairs.

Head densely punctate, coriaceous; eyes contiguous to each other at the base for a short distance, then separated anteriorly leaving a narrow triangular frons between them. Rostrum continuous to frons in an arc in profil, about as long as head and pronotum combined, almost of the same width and thickness throughout, irregularly proved with oblong punctures in three pairs of rows behind antenna1 sockets, carinae weak or indefinite. Antennae inserted in (male) or behind the middle (female) of rostrum, with length (width) of segments from scape to club as 60(14):32(14):20(7.5):16(7.3):13(7.3):11(8):9(11): 14(18):14(19):35(19).

Pronotum 1.4 times as broad as long, broadest at basal third, then slightly narrowed posteriorly, and rather straightly narrowed anteriorly to subapical constriction, which is

weak throughout, disc densely with small punctures, their interstices much narrower than diameter and alutaceous, with five to seven stout setae on each side. Scutellum subtriangular, punctate, alutaceous.

Elytra ovate, 1.3-1.4 times as long as broad, boradest at the middle, basal margin weakly and evenly arcuate, or almost straight between third and seventh striae, striae distinct throughout, intervals about as broad as striae, not depressed behind scutellum. Pygidium narrowly exposed in male, or almost covered in female.

Middle femora a little longer than fore femora, both of the same thickness, hind femora 2.3 times as long as broad, tarsal grooves fringed with a row of black stout spines along apical margin.

Mesosternal process weakly convex in male, flat in female. Mesostemum and sides of metastemum strongly punctate, median part of metasternum and venter similarly punctate and alutaceous. First suture indefinite in the middle, second to fourth sutures strong.

Male aedeagus with short struts, tegmen membranous at dorsal side, without parameres; spermatheca thin, curved, spermathecal gland distant from the insertion of duct, bulsa copulatrix with sclerotized teeth and partly asperate.

Length to the anterior margin of head: 1.6-1.9 mm.

Holotype: male (Type No. 3040, Kyushu Univ.), Doi Pui (alt.1300 m), near Chaing Mai, Thailand, 18.vi. 1965, K. Morimoto leg.

Paratypes: 11 males and 4 females, same data as holotype; 2 females, Doi Pui (summit), 17.vi.1965, K. Morimoto leg.; 1 female, Doi Pui, l.iii.1992, Y. Okushima leg.; 3 males and 12 females, Doi Suthep (Temple), near Chaing Mai, Thailand, 12.vi.1965, Y. Miyatake leg.: 1 female, Doi Suthep-Pui, 12-16.iii.1992, Y. Okushima leg.; 1 male, Basantapur (alt. 2300 m)[27°07'N, 87" 24'E], East Nepal, 6.v.1972, Y. Nishida leg.

Distribution: Thailand, Nepal.

Key to species of *Indodinorrhopalus.*

[Character of I. ***imphalensis*** is quoted from the original description]

1(2) Eyes contiguous on frons, elytra fulvous with dark spots in general. Thailand, Nepal. (Figs. 23,24). ..... ***Indodinorrhopalus guttatus*** sp. nov.

2(1) Eyes widely separated each other on frons, elytra at most with indefinite bands by blackish hairs.

3(4) Pronotum arcuate anteriorly, elytra almost straight and oblique at each base. India: Manipur. ..... ***Indodinorrhopalus imphalensis*** Pajni et Sood, 198 1

4(3) Pronotum truncate at apex, elytra weakly arcuate anteriorly between first and fourth striae at base. (Fig. 25). ..... ***Indodinorrhopalus okushimai*** sp. nov.

Rhynchaenus Clairville et Schellenberg, 1798

Rhynchaenus (=*Orchestes*) of the traditional sense is paraphyletic and must be divided into several genera from the view point of phylogeny as will be shown in part two of our study in this journal.

Rhynchaenus of the present definition is the same as that of the subgenus ***Rhynchaenus*** by Morimoto (1984) characterized by the small uncus of the fore and middle tibiae,

unarmed hind femora and simple hind tibiae, and further apomorphic characters are newly added here as follows: Tergum of abdomen with a pair of spicule patches on fourth, fifth and sixth tergites respectively, seventh tergite with six scrapers in each of paired rows; spermatheca with spermathecal gland distant from insertion of the duct as in the case of ***Tachyerges; eyes*** approximate each other at the base, then gradually separated anteriorly leaving triangular frons between them; femora unarmed, not sulcate for receiving tibiae, hind femora simple, 2.8 times as long as broad. General coloration yellowish brown to reddish brown, with blackish ventral surface and a dark fascia at the middle of elytra..

This genus comprises two species, ***R. lonicerae*** (Herbst, 1795) from Europe and the following species.

Rhynchaenus pacificus Faust, 1887

(Figs. 26, 27, 77-85)

Orchestes pacificus Faust, 1887, Deut. Ent. Zeit., XXXI: 172 (Wuladivostok).

Rhynchaenus (Orchestes) *pacificus*: Winkler, 1932, Col. Cat. reg. palaearc.: 1629 (Uss.). - Klima, 1935, Col. Cat., 145, Rhynchaeninae: 17 (Amurland).

Rhynchaenus (Rhynchaenus) pacificus: Ter-Minassian, 1953, Ent. Oboz., XXXIII: 3 13 (Priamuriy).

Rhynchaenus terminassianae Egorov, 1978, Ent. Oboz., LVII: 606 [Ent. Rev., 57: 415, 1979] (Maritime Territory), **- syn. nov.**

Generally yellowish brown; head, rostrum excepting apex, meso- and metastema, venter excepting apical segment blackish, femora each with a dark ring behind apex, pronotum usually infuscate excepting margins, each elytron usually with a U-shaped brownish to blackish patch in the middle, of which arms extending to the base along suture and lateral side, third and fifth intervals infuscate at the base, often with an infuscate band on declivity in darker individual; evenly clothed with greyish hairy scales except for the dark area on elytra, where scales being brownish black. Antenna1 insertion index 38-40 (male), or 26-32 (female). Hind femora 2.8 times as long as broad.

Length: 2.7-3.0 mm.

Specimens examined: [Japan] Iwasaki, Moriyama, Nishitsugaru-gun, Aomori Pref., 1 female, 25.vii.1991, A. Abe leg. [Korea] 20 exs. from Joeonrabukudo (NaeLyonRi), Kyongsang namdo (Mt. Jili, Joochunmeon, Macheongmeon), Kyonggido (Kwangnung) and Kang weondo (Chunchon).

Distribution: Russian Far East, Korea -new record, Japan-new record.

This species is considerably variable in coloration and ***R. terminassianae*** Egorov is nothing but a type of ***R. pacificus*** Faust.

Key to species of the genus *Rhynchaenus.*

l(2) Yellowish brown to reddish brown, with blackish undersurface, median band and ring near apex of hind femora; scutellum visibly of the same colour as elytra; elytra with second to fourth striae straight. Europe.
..... ***Rhynchaenus lonicerae*** (Herbst, 1795)

2(1) Coloration similar to preceding, but head, median part of pronotum, basal part of third and fifth intervals of elytra more or less infuscate; scutellum with dense greyish

hairy scales; elytra with second to fifth striae curved outwards at base. Far East Russia, Korea, Japan. (Figs. 29, 30). ..... *Rhynchaenus pacificus* (Faust, 1887)

Orchestes (Orchestes) amurensis Faust, 1887

(Figs. 29, 30)

Orchestes amurensis Faust, 1887, Deut. Ent. Zeit., XXXI: 172 (Chabarofka).

Rhynchaenus amurensis: Winkler, 1932. Col. Cat. reg. palaearc.: 1629 (Uss.). - Egorov, 1977, Syst. faun. ins.: 39 (Priamuriy, Primoriy). - Krivolutskaya, Ter-Minassian & Egorov, 1978, Trudy Biol.-Ptsch. Inst., (n.s.), 50: 100 (Priamuriy, Primoriy, Kunashiri).

Rhynchaenus (Orchestes) amurensis: Klima, 1935, Col. Cat., 145, Rhynchaeninae: 9 (Amur).

Rhynchaenus (Rhynchaenus) amurensis: Ter-Minassian, 1953, Ent. Oboz., XXXIII: 3 14 (Priamuriy).

Orchestes takabayashii Kôno, 1930, Ins. Mats., V: 25 (Takao). **syn. nov.**

See Morimoto (1984, Esakia, 22: 65) for other synonymy of *takabayashii*.

Distribution: Russian Far East, Korea, Japan

Orchesfes (*Orchestes*) *jota* (Fabricius, 1787)

(Fig. 31)

See Klima, 1935, for synonymy.

Previous records of 0. *jota* from Japan were made upon the misidentification of the preceding species without whitish hairs on the pronotum (Morimoto, 1984), but true *jora* is newly recorded here from Japan as follows:

Shimauchi, Matsumoto City, Nagano Pref., 1 male and 1 female, 14.v.1989, S. Miyakawa leg. Higashiyama, Kisofukushima, Nagano Pref., 1 female, 28.vi.1986, K. Matui leg. Mt. Shiratori, Izumi, Kumamoto Pref., 1 female, 7-8.vi.1989, T. Yasunaga leg.

Distribution: Europe, Russia, Japan (Honshu, Kyushu)-new record.

These two species are separable by the following points:

0. *amurensis:* Dorsal contour of rostrum and forehead continuously arched in profile; rostrum with median carina or ridge almost in entire length; pronotum usually with a pair of greyish indefinite stripes; elytra with greyish band along basal margin, often with scattered greyish hairs.

0. *jota*: Dorsal contour of rostrum and forehead weakly depressed at the junction in profile; rostrum with short median carina at the base, then flattened dorsally to apex, shiny; pronotum without hairy stripes, elytra without basal band, vesture of pronotum and elytra concolorous except for postscutellar spot.

Orchestes (Orchestes) yokoae sp. nov.

(Fig. 28)

Female. Reddish brown, antennae and tarsi yellowish brown, rostrum and meso- and metasterna dark brownish; derm clothed with greyish hairy scales, which more or less irregularly arranged on pronotum and elytra making indefinite mottles, a little denser in front of scutellum and medial part on pronotum, four indefinite bands on elytra and postscutellar patch, a little denser along side margins behind eyes to metepistema.

Head densely punctate, alutaceous, with a trace of median carina; forehead between eyes narrowest at posterior third, with two rows of hairs, then dilated anteriorly and posteriorly, straightly continous to the base of rostrum dorsally in profile. Rostrum weakly curved, almost of the same width and thickness throughout, as long as head and pronotum combined, antenna1 insertion index 25, with five carinae excepting apex, median carina dilated and flattened a little before the base, punctate between carinae. Antennae with length (width) of segments from scape to club as 26(9):19(8):12(6):8(5.8):6(6):6(6.2):5(7.7): 9(13.5):8(14.2): 16(14).

Pronotum 1.5-1.6 times as wide as long, widest at basal third, subapical constriction obsolete, disk reticulately punctate, coriaceous, without median depression, each side with two stout setae behind the widest point. Scutellum ovate, punctate, alutaceous, haired as on the base of second interval.

Elytra oblong-oval, 1.4-1.5 times as long as wide, almost parallel-sided from a little behind fumeri to apical third, subtruncate at apical margin, faintly depressed transversely on declivity, intervals flat, finely rugulose, striae much narrower than intervals, second to fourth striae straight to the base. Pygidium with dense small punctures and alutaceous.

Fore coxal cavities contiguous. Thoracic sterna and first ventrite at base punctate, interstices between them about as wide as or a little narrower than their diameter, punctures weaker and shallower on the rest of venter.

Fore and middle femora armed with spine, sulcate in entire length for receiving tibia, Hind femora swollen, 1.9 times as long as wide, with six denticles, two long setae, three long spines and six to eight short spines at posterior margin. Hind tibiae curved, with long setae along dorsal margin of flat surface.

Male. Unknown.

Length: 2.9 mm (holotype), or 2.4 mm (paratype).

Holotype: female (Type No. 3041, Kyushu Univ.), Mt. Yuwandake, Amami-Oshima I., 3.iv.1989, Y. Takematsu leg.

Paratypes: Chuo-rindo, Amami-Oshima I., 1 female, 26.iii.1990, Y. Okushima leg.; 1 female, 5.iii.1995, S. Nirasawa leg.

Distribution: Japan (Amami-Oshima I.).

This new species is easily recognized by the coloration and mottled derm by hairy scales. Name is dedicated to Miss. Yoko Takematsu, who collected this rare species for the first time.

Orchestes (Alyctus) *kimotoi* (Morimoto)

(Figs. 32, 86-88)

Rhynchaenus (*Alyctus*) ***kimotoi*** Morimoto, 1984, Esakia, (22): 43 (Nagano: Shirahone, Mt. Asama; Awomori: Shimokita).

Through the courtesy of Mr. M. Horikawa, we could examine a lot of additional specimens taken at the same time from Itabishi, Minamimaki-mura, Nagano Pref., 17. vii. 1994, on *Corylus* ***heterophylla*** var. ***thunbergii*** (Hashibami in Japanese), and the male aedeagus is illustrated here for the first time on these material.

Pronotum has one to three erect setae on each side in front of hind comer in fresh specimens, but the setae are easily snapped or left out in some specimens as described in the

original description. The male aedeagus is characteristic by the rather long prolongation of the ventral wall basally as a broad plate, to which the struts attach at latero-basal comers.

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Explanations of Figures

Figs **1-32.** Photographs of
1: ***Sphaerorchestes kawasei*** sp. nov. 2: ***Sphaerorchestes kojimai*** sp. nov. **3:** ***Sphaerorchestes*** *nepalensis* sp. nov. 4: ***Imachra*** *saigusai* sp. nov. ***5: Zmachra*** *albosuturalis* sp. nov. ***6: Imachra siamensis*** sp. nov. ***7: Imachra sabahna*** sp. nov. ***8: Imachra bifasciata*** sp. nov. 9: ***lmachra ruficollis*** Pascoe. 10: ***Imachra*** *oculata* (Morimoto). Fig. 11: ***Imachra maetui*** (Morimoto). 12: ***Imachra decipiens*** (Roelofs). 13: ***Imachra nipponica*** (Morimoto). 14: ***Imachra*** *shirozui* (Morimoto). 15: ***Synorchestes grisescens*** Voss. 16: ***Tachyerges salicis*** (Linnaeus). 17: ***Tachyerges dauricus*** (Faust). 18,19: ***Tachyerges nakamurai*** sp. nov. ***20: Tachyerges ephippiatus*** (Say). 21: ***Tachyerges niger*** (Horn). 22: ***Hyporhynchaenus sphinxioides*** sp. nov. 23,24: ***Indodinorrhopalus guttatus*** sp. nov. ***25: Indodinorrhopalus okushimai*** sp. nov. 26,27: *Rhynchaenus* ***pacificus*** (Faust). 28: ***Orchestes yokoae*** sp. nov. 29,30: ***Orchestes amurensis*** (Faust). 31: ***Orchestes*** *jota* (Fabricius). 32: ***Orchestes kimotoi*** (Morimoto).

Figs 33-37. ***Sphaerorchestes kawasei*** sp. nov. (holotype, male)
33: Body, ventral. 34: Head and rostrum, lateral. 35: Hind leg. 36: Hind tibia showing tarsal groove. 37: Antenna.

Figs. 38-43. ***Synorchestes grisescens*** Voss (male)
38: Body, ventral. 39: Head and rostrum, lateral. 40: Hind leg. 41: Hind tibia showing tarsal groove. 42: Femoral apodeme of hind leg. 43: Antenna.

Figs. 44-46. ***Imachra*** *ruficollis* Pascoe (female).
44: Body, ventral. 45: Head and rostrum, lateral. 46: Antenna.

Figs. 47-49. ***Zmachra maetai*** (Morimoto)
47: Penis, dorsal. 48: Penis, lateral, 49: Tegmen.

Figs. 50-53. ***Hyporhynchaenus sphinxioides*** sp. nov. (male)
50: Body, ventral. 51: Head and rostrum, lateral. 52: Antenna. ***53:*** Legs.

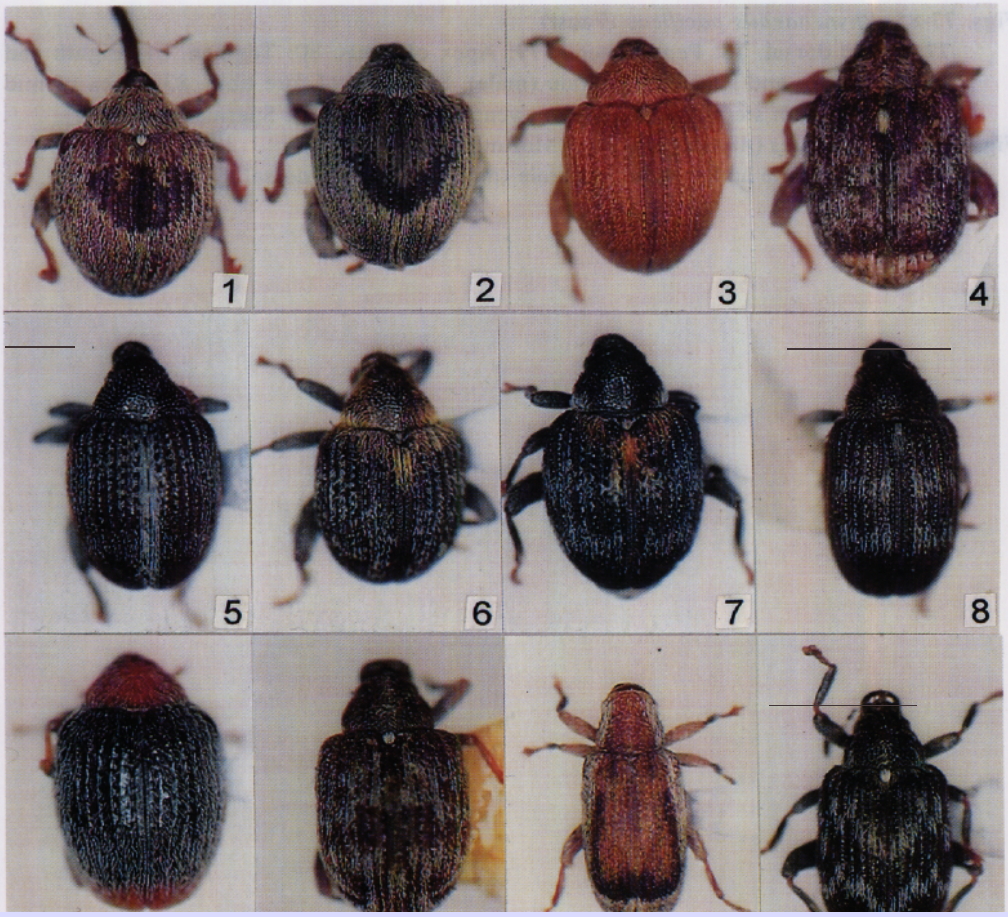
Figs 54-59. ***Tachyerges dauricus*** (Faust)
54: Penis, dorsal. 55: Penis, lateral. 56: Tegmen. 57: Ninth stemite and spiculum gastrale (male). 58: Eight stemite and spiculum ventrale (female). 59: Spermatheca.

Figs 60-65. ***Tachyerges nakamurai*** sp. nov.
60: Penis, dorsal. 61: Penis, lateral. 62: Tegmen. 63: Ninth stemite and spiculum gastrale (male). 64: Eighth stemite and spiculum ventrale (female). 65: Spermatheca.

Figs 66-76. *Indodinorrhopalus* ***guttatus*** sp. nov.
66: Penis, dorsal. 67: Penis, lateral. 68: Tegmen. 69: Eighth and ninth stemites and spiculum gastrale (male). 70: Legs. 71: Bursa copulatrix showing denticles. 72: Eighth stemite and spiculum ventrale (female). 73,74: Claws. 75: Spermatheca. 76: Antenna.

Figs. 77-85. *Rhynchaenus pacificus* (Faust)
77: Penis, dorsal. 78: Penis, lateral. 79: Apex of penis. 80: Tegmen. 81: Eighth and ninth stemites and spiculum gastrale (male). 82: Apex of fore tibia. 83: Apex of mid tibia. 84: Eighth stemite and spiculum ventrale (female). 85: Spermatheca.

Figs. 86-88. *Orchestes* (*Alyctus*) *kimotoi* (Morimoto)
86: Ninth stemite and spiculum gastrale (male). 87: Penis, dorsal. 88: Penis, lateral.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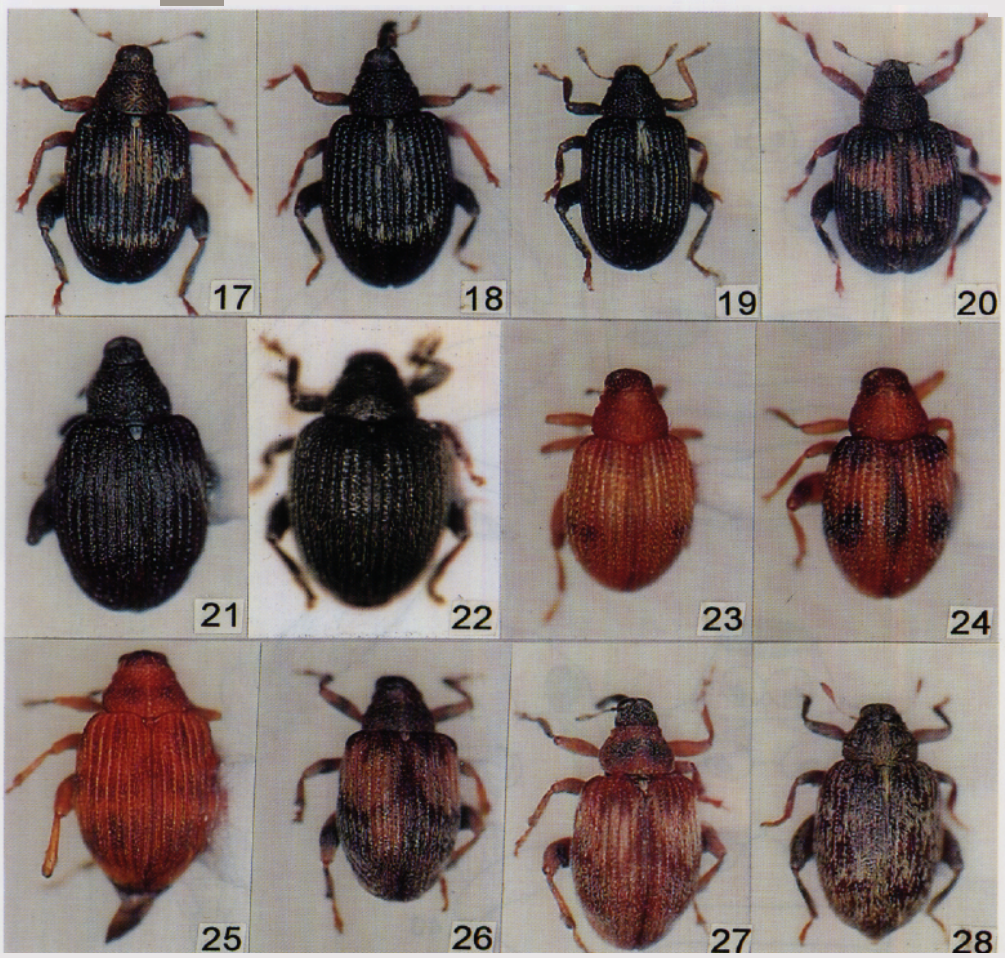
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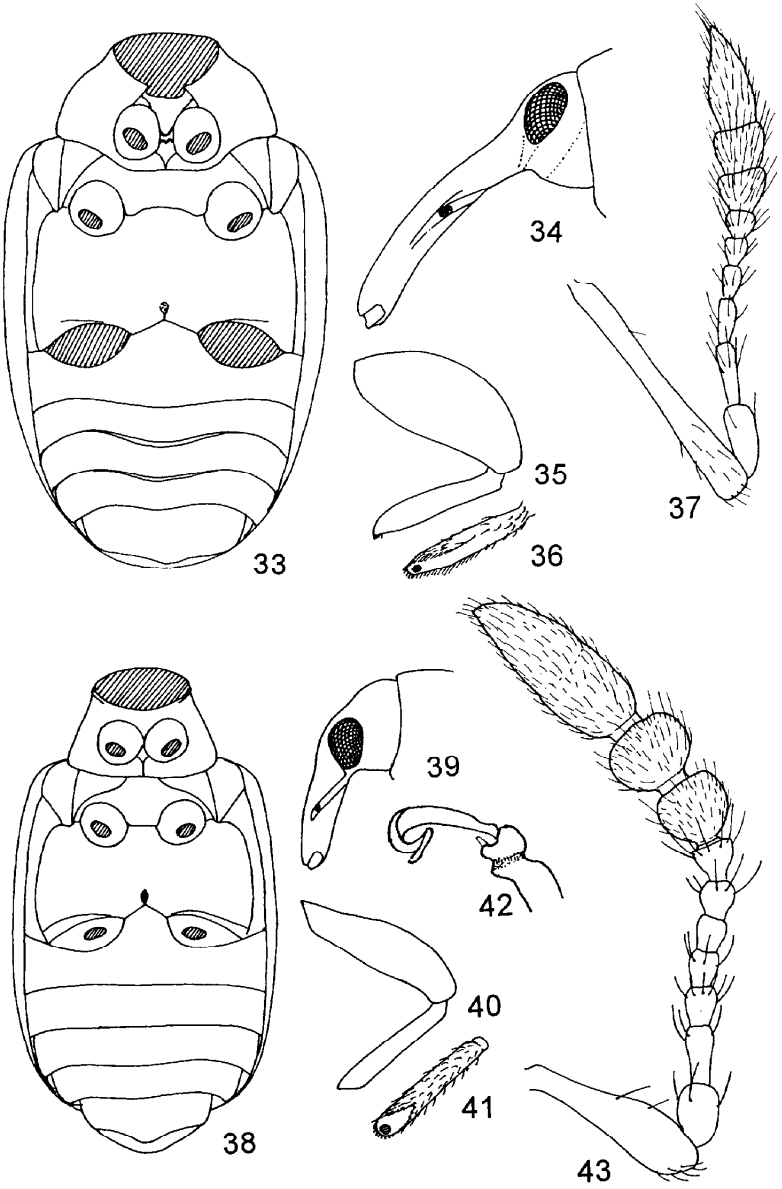
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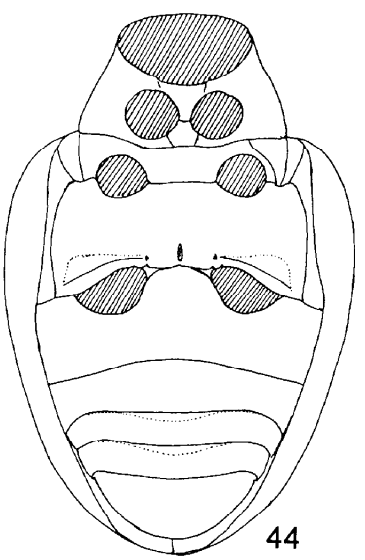
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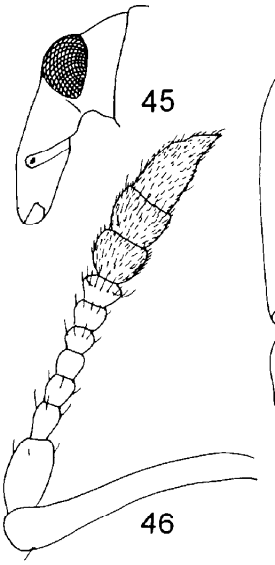
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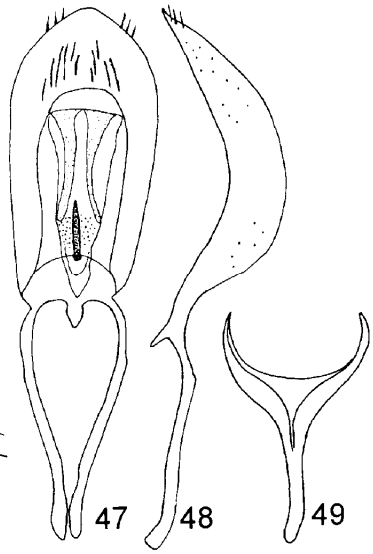
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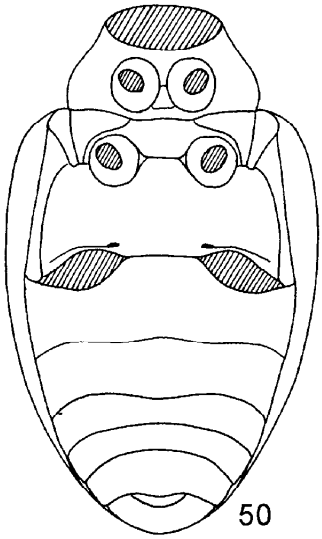
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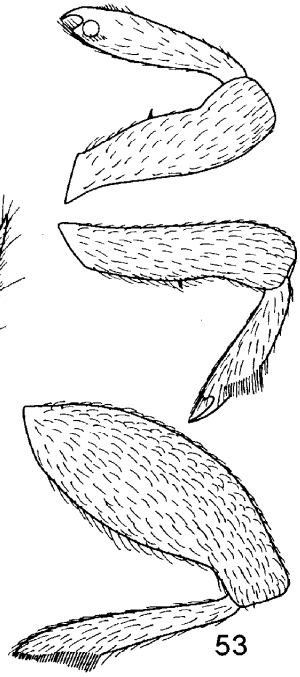
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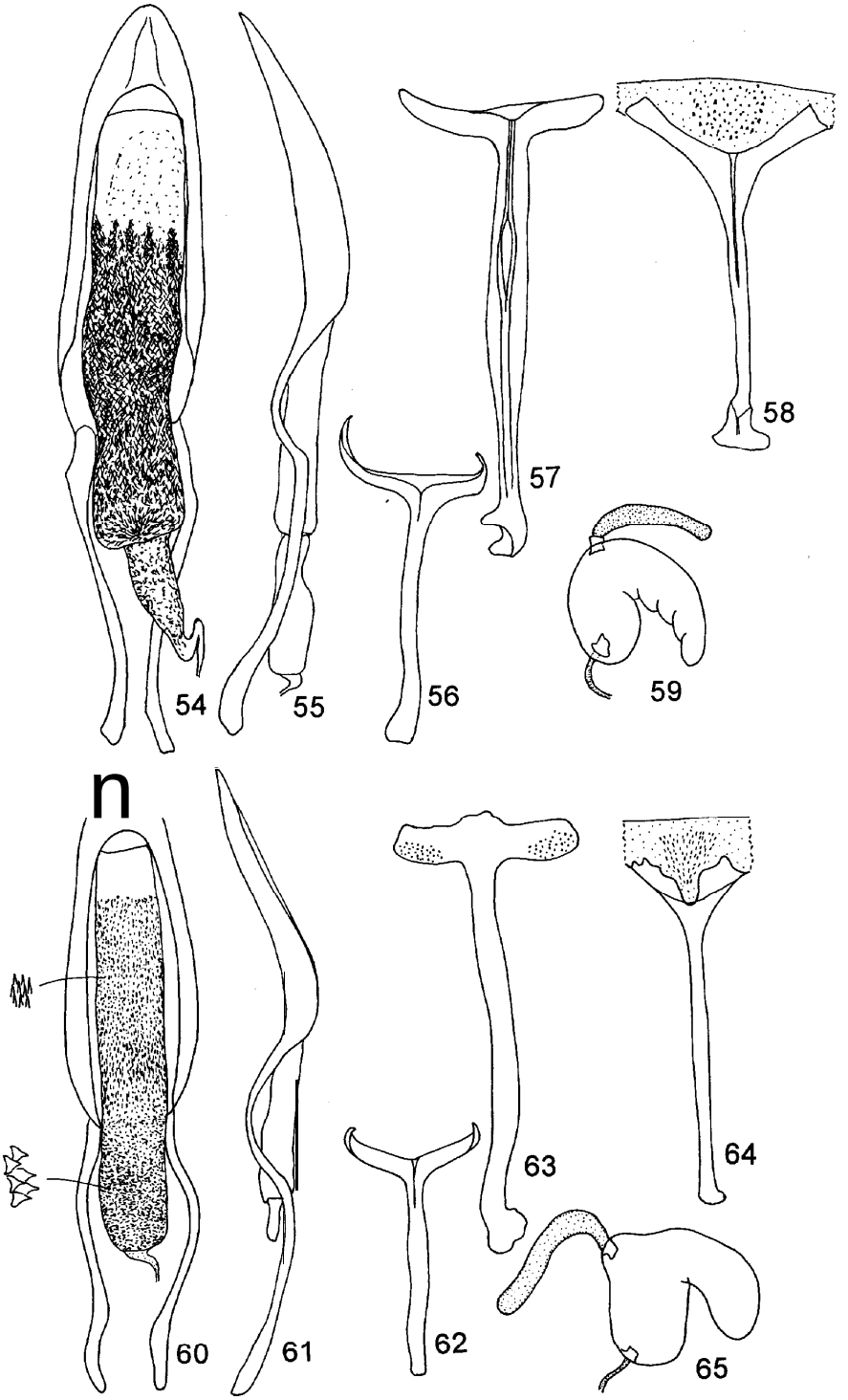
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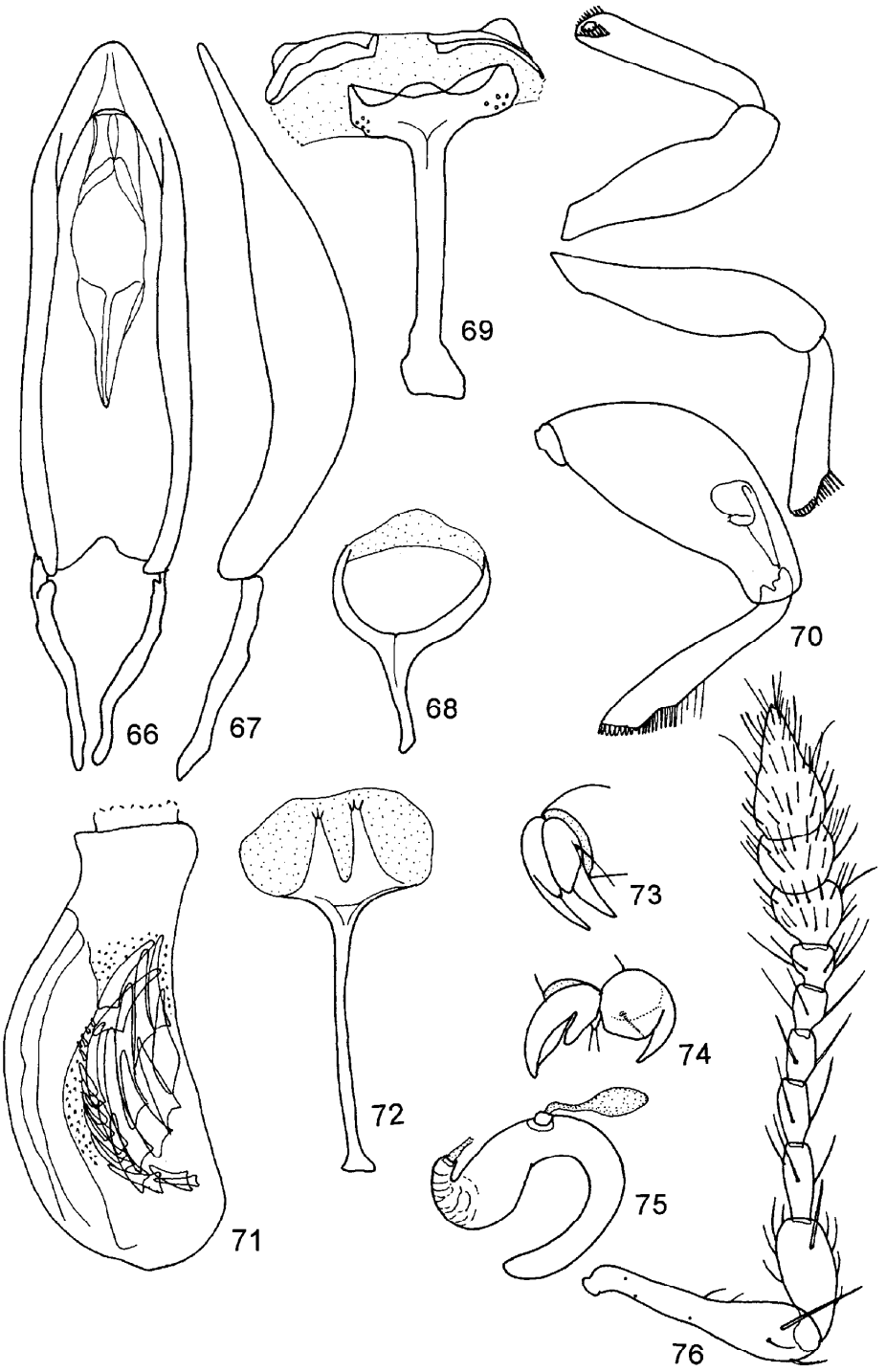
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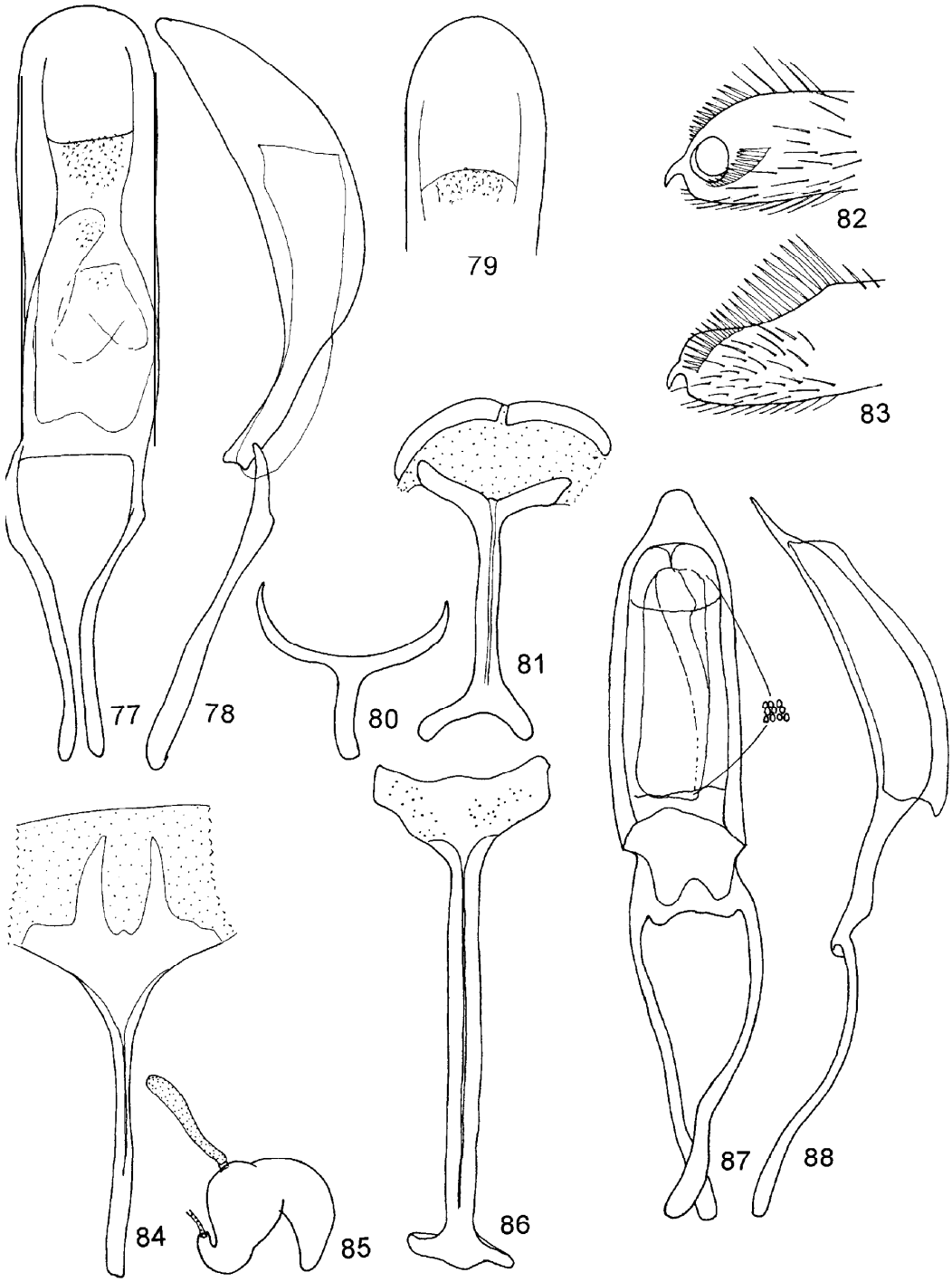
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